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OBSERVATIONS

MADE AT THE

MAGNETICAL AND METEOROLOGICAL OBSERVATORY

AT

TORONTO IN CANADA.

PRINTED BY ORDER OF HER MAJESTY'S GOVERNMENT,

UNDER THE SUPERINTENDENCE OF

MAJOR-GENERAL EDWARD SABINE,

OF THE ROYAL ARTILLERY.

Vol. III.—1846, 1847, 1848.

With Abstracts of Observations to 1855 inclusive.

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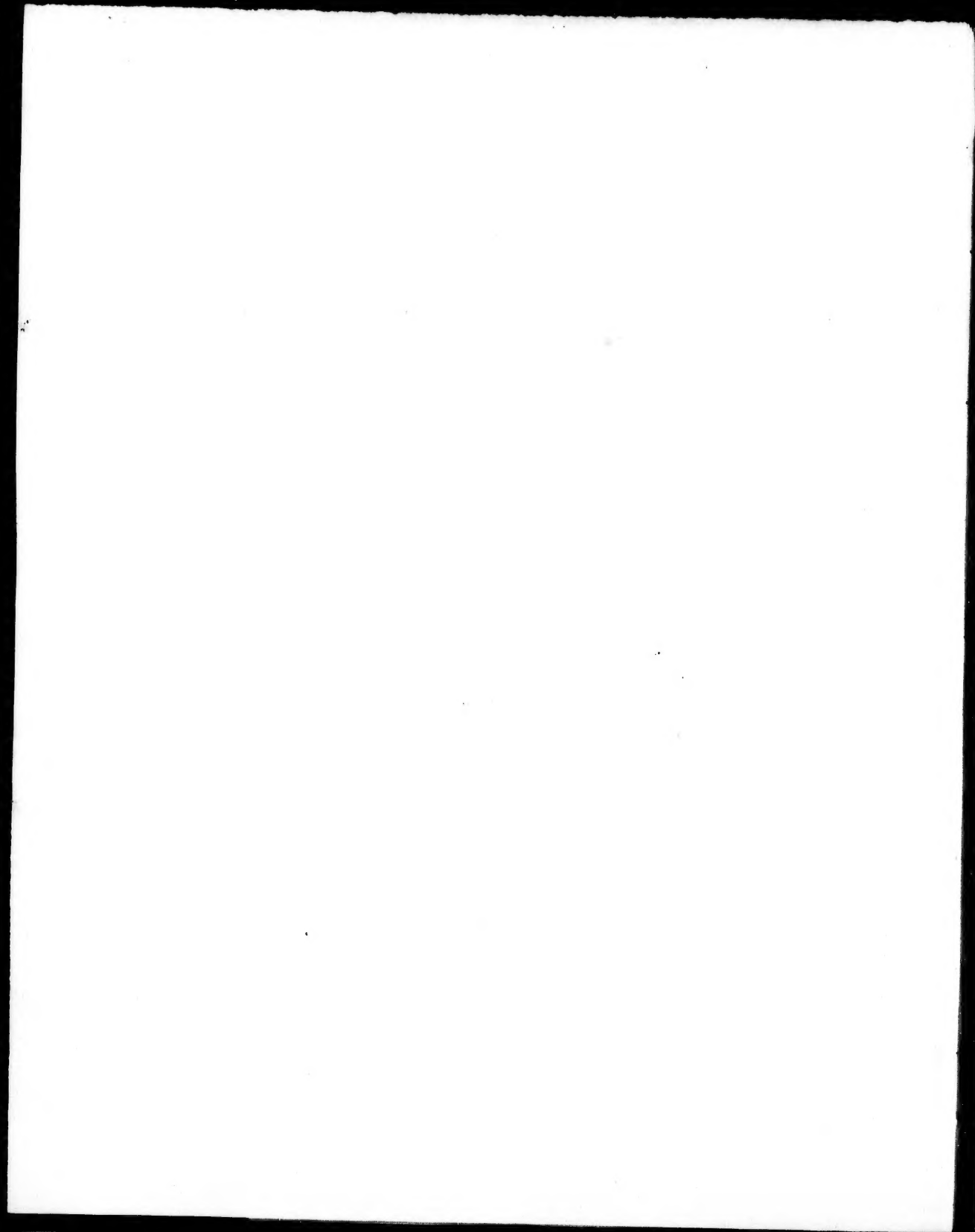
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INTRODUCTION.

It has been suggested to me that the time is arrived when a brief review of what the Colonial Magnetic Observatories have accomplished may be desirable, showing—primarily, how far they have successfully carried out the instructions originally drawn up for their guidance by the Committee of Physics of the Royal Society (and approved by the President and Council of that body); and, collaterally, how a similar organization may be made available for the further prosecution of the objects for which the Colonial Observatories were established.

The magnetic investigations designed to be carried into execution by the Colonial Observatories embraced a much wider scope than had been contemplated by any previous institutions, or than had been provided for by the arrangements or instrumental means of any then existing establishment, whether national or private. Not, as previously, limited to observations of a single element (the Declination),—or combining at the most one only of the components of the Magnetic Force,—the instructions of the Royal Society, and the instrumental means prepared under its direction, provided for the examination, in every branch of detail, of each of the three elements which, taken in combination, represent, not partially but completely, the whole of the magnetic affections experienced at the surface of the globe, classed under the several heads of absolute values, secular changes, and variations either periodical or occasional,—and proceeding from causes either internal or external. To meet the requirements of inductive reasoning, it was needful that the results to be obtained should comprehend all particulars under these several heads attainable by an experimental inquiry of limited duration. That no uncertainty might exist as to the objects to which, in so novel an undertaking, attention was to be directed, the Report of the Committee, approved and adopted by the President and Council of the Royal Society, conveyed in a very few sentences, remarkable alike for their comprehensiveness and conciseness, the desiderata of magnetical science. It may be convenient to reproduce these, when desiring to show the degree in which the Observatories have fulfilled their contemplated purposes:—"The observations will naturally refer

" themselves to two chief branches, into which the science of terrestrial magnetism in
 " its present state may be divided. The first comprehends the actual distribution of
 " the magnetic influence over the globe, at the present epoch, in its mean or average
 " state, when the effects of temporary fluctuations are either neglected, or eliminated
 " by extending the observations over a sufficient time to neutralize their effects. The
 " other comprises the history of all that is not permanent in the phenomena, whether
 " it appear in the form of momentary, daily, monthly, or annual change and restoration,
 " or in progressive changes not compensated by counter-changes, but going on conti-
 " nually accumulating in one direction, so as in the course of many years to alter the
 " mean amount of the quantities observed."—(Report of the Committee of Physics,
 pp. 1 and 2.)

With reference to the first of these two branches, viz. the actual distribution of
 the magnetic influence over the globe at the present epoch, the Report goes on to
 state:—"The three elements, viz. the horizontal direction, the dip, and the intensity
 " of the Magnetic Force, require to be precisely ascertained before the magnetic state
 " of any given station on the globe can be said to be fully determined and
 " as all these elements are at each point now ascertained to be in a constant state
 " of fluctuation, and affected by transient and irregular changes, the investigation
 " of the laws, extent, and mutual relations of these changes is now become essential to
 " the successful prosecution of magnetic discovery."

With reference to the second branch, viz. "the secular and periodical variations,"
 it is observed, that "the progressive and periodical being mixed up with the transitory
 " changes, it is impossible to separate them so as to obtain a correct knowledge and
 " analysis of the former, without taking express account of and eliminating the latter;"
 and with reference to the secular changes in particular, it is remarked, "These cannot
 " be concluded from comparatively short series of observations, without giving to those
 " observations extreme nicety, so as to determine with perfect precision the mean
 " state of the elements at the two extremes of the period embraced, which, as already
 " observed, presupposes a knowledge of the casual deviations."

It is clear from these extracts, that in the discussion of the observations the first
 point to be attended to, in the order of time, ought to be an investigation into "the
 " laws, extent, and mutual relations of the transient and" (as they were called at the
 time the Report was written) "*irregular* changes," as a preliminary step to the elimi-
 nation of their influence on the observations from which a correct knowledge and
 analysis of the progressive and periodical changes were to be obtained. It will be

proper to show, therefore, in the first place, what the Observatories have accomplished in regard to the so-called casual or transitory variations.

Casual Variations.—All that was known regarding these phenomena at the period when the Report of the Committee of Physics was written, was, that there occurred occasionally, and, as it was supposed, irregularly, disturbances in the horizontal direction of the needle, which were known to prevail, with an accord which it was impossible to ascribe to accident, *simultaneously* over considerable spaces of the earth's surface, and were believed to be in some unknown manner connected, either as cause or effect, with the appearances of the aurora borealis. The chief feature by which the presence of a disturbance of this class could be recognized at any instant of observation,—or by which its existence might be subsequently inferred independently of concert or comparison with other Observatories,—appeared to be the deflection of the needle from its usual or normal position to an amount much exceeding what might reasonably be attributed to irregularities in the ordinary periodical fluctuations. The observations which had been made on the disturbances anterior to the institution of the Colonial Observatories had been chiefly confined to the Declination. A few of the German Observatories had recently begun to note the disturbances of the Horizontal Force, but as yet no conclusions whatsoever as to their laws had been obtained;—in the words of the Committee's Report, the disturbances “apparently observe no law.”—(Report, p. 10.) By the instructions cited above, the field of research was enlarged, being made to comprehend the disturbance-phenomena of the *three* elements; and the importance of their examination was urged, not alone as a means of eliminating their influence on the periodic and progressive changes, but also on the independent ground that “the theory of the transitory changes might prove itself one of the most interesting and important points to which the attention of magnetic inquirers can be turned, as they are no doubt intimately connected with the general causes of terrestrial magnetism, and will probably lead us to a much more perfect knowledge of those causes than we now possess.”

The feature which has been referred to as furnishing the principal if not the only certain characteristic of a disturbance of this class, namely, the *magnitude* of the departure from the usual or normal state at the instant of observation, has, in the discussion of the observations, been made available for the object at present under notice; it has afforded the means of recognizing and separating from the entire mass of hourly observations, taken during several years, a sufficient body of observations to furnish the necessary data for investigating at three points of the earth's surface—one in the

temperate zone of the northern hemisphere, a second in the temperate zone of the southern hemisphere, and a third in the tropics—the laws or conditions regulating or determining the occurrence of the magnetic disturbances. The method by which this separation has been effected has been explained on several recent occasions, and will be found fully described in pp. viii, ix, and x of the present volume, when treating of the disturbances of the Horizontal Force at Toronto. By processes of a similar description, the disturbances of principal magnitude in each of the three elements, the Declination, Inclination, and Total Force, have been separated from the other observations at the three Observatories of Toronto, Hobarton, and St. Helena, and submitted to an analysis, of which the full particulars as regards the Toronto observations are contained in the present volume, as those of Hobarton and St. Helena will be in volumes which have yet to appear. By the adoption of a uniform magnitude as constituting a disturbance throughout the whole period comprised by the analysis, the amount of disturbance in the several years, months, and hours is rendered inter-comparable. The result of this investigation (which could not be otherwise than a very laborious operation, since the Toronto observations alone, for example, considerably exceeded 100,000 in number, each of which had to be passed through several distinct processes), has made known to us that this class of phenomena, which may with propriety and advantage receive in future the appellation of *occasional*, are, in their mean or average effects, subject to periodical laws of a very systematic character, placing them, as a first step towards an acquaintance with their physical causes, in immediate connection with the *Sun* as their primary exciting cause. They have, 1°, a *diurnal* variation which follows the order of the solar hours, and manifests, therefore, its relation to the sun's position as affected by the earth's rotation on its axis; 2°, an *annual* variation, connecting itself with the sun's position in regard to the ecliptic; and, 3°, a third variation, which seems to refer still more distinctly to the direct action of the sun, since both in period, and in epochs of maximum and minimum, it coincides with the remarkable solar period of about ten or eleven of our years, the existence of which has been recently made known to us by the phenomena of the solar spots; but which, as far as we yet know, is wholly unconnected with any thermic or physical variation of any description (except magnetic) at the surface of the earth, and equally so with any other cosmical phenomena with which we are acquainted. The discovery of a connection of this remarkable description, giving apparently to magnetism a much higher position in the scale of distinct natural forces than was previously assigned to it, may justly be claimed on the part of the Colonial Observatories, as the result of the system of observation enjoined (and so patiently and carefully maintained), and of the investigation for which it has supplied the data; since it was by means of the

disturbance-variations so determined, that the coincidence between the phenomena of the solar spots and the magnitude and frequency of magnetic disturbances was first perceived and announced.—(Phil. Trans. 1852, Art. viii.)

The extent and mutual relation of the disturbance-variations of the three elements, even at a single station (as is shown in the present volume for Toronto), supply a variety of points of approximation and of difference, which are well suited to elucidate the physical causes of these remarkable phenomena; but valuable as such aids may be when obtained for a single station, their value is greatly augmented when we are enabled to compare and combine the analogous phenomena as they present themselves at different points of the earth's surface. To give but a single example: there are certain variations produced by the mean effects of the disturbances which attain their maximum at Toronto during the hours of the night (pp. lix—lxi of this volume); the corresponding variations attain their maximum, at Hobarton, also during the hours of the night, but with a small systematic difference as to the precise hour, and with this distinguishing peculiarity, that the deflection at Hobarton is of the opposite pole of the needle (or of the same pole in the opposite direction) to the Toronto disturbance; whilst at a third station, St. Helena, which is a tropical one, the hours of principal disturbance are those, not of the night, but of the day. A very superficial examination is sufficient to show that for the generalisation of the facts,—a generalisation which is indispensable for their correct apprehension and employment in the formation of a theory,—the stations at which the phenomena are known must be increased. Those which were chosen for a first experiment were well selected to prove the importance of the investigation, and thus to lead to its extension. It is only at the Colonial Observatories that the disturbance-variations have hitherto been made out; and, guided by experience, we may infer that by adopting a similar organization and similar processes of observation at other stations, similar results may be expected, and the inquiry be further prosecuted.*

* The Colonial Observatories which were under my superintendence were originally four in number; viz. Toronto, St. Helena, Cape of Good Hope, and Hobarton. In July 1846 the detachment of the artillery at the Cape of Good Hope was withdrawn by orders from England, and the charge of the Magnetical and Meteorological Observations transferred to Mr. Maclear, the Government astronomer at that station. The Magnetical Observations made at the Cape, whilst the Magnetic Observatory was one of those which were under my superintendence, were published in 1851 in a volume similar to the present. Since the transfer to Mr. Maclear, Mr. Pierce Morton, a gentleman of considerable mathematical attainments, who has been added as an assistant to take charge, under Mr. Maclear, of that branch of the Cape Observatory, has applied himself to the investigation of the lunar magnetic influence (as derived from the Cape Observations), with a view of presenting the results to the Royal Society. For this and for other investigations into which he may desire to enter, he will have the entire series of observations, viz. those, as above stated, already published, and those which have been made since the transfer of the Observatory up to the present time.

Periodical Variations.—The anticipation expressed in the Report of the Committee of Physics, that, for the purpose of obtaining a correct knowledge of the “*regular periodical variations*,” it would be found necessary to eliminate the “casual perturbations,” has been fully confirmed. Had the latter been strictly “casual,” or accidental in a sense contra-distinguished from and opposed to periodical, a sufficiently extended continuance of observation might have occasioned their mutual compensation; but now that we have learned that the mean effects which they produce are governed by periodical laws, and that these laws and those of the regular periodical variations are dissimilar in their epochs, it is manifest that in their joint and undivided effects we have two variations, due to different causes and having distinct laws, superimposed upon each other; *to know the one correctly, we must necessarily therefore eliminate the other.* A striking illustration of the importance of such elimination is furnished by the solar-diurnal variation of the Total Force. It will readily be imagined that the question must be an important one, whether a variation which is supposed to derive its origin from the sun be a single or a double progression; whether it have two maxima and two minima in the 24 hours, or but one maximum and one minimum in that period. When no separation is made of the disturbances, the progression appears to be a double one, having two minima, one occurring in the day and the other in the night. With the removal of the disturbed observations the night-minimum disappears, and we learn that the regular solar-diurnal variation of the Total Force has but one notable inflection in the 24 hours; viz. that which takes place during the hours when the sun is above the horizon. The night-minimum is, in fact, the mean effect of the occasional disturbances (pp. xciii—xcv of this volume). It is probable that the nocturnal inflection of the solar-diurnal variation of the Declination may be ascribed to the same cause, namely, to the superposition of two distinct variations.

A careful analysis of the solar-diurnal variations of the Declination at the Colonial Observatories has brought to light the existence at all these stations of an annual inequality in the direction of the needle, concurrent with changes in the *sun's declination*, having its maxima (in opposite directions) when the sun is in or near the opposite solstices, and disappearing at or near the epochs of the equinoxes. An intercomparison of the results of the analysis at these stations has shown, that this inequality has the remarkable characteristic of having notably the same direction and amount in the southern as in the northern hemisphere, and in the tropical as in the temperate zones. An ingenious explanation of these phenomena has been suggested by Dr. Langberg of Christiania (Proceedings of the Royal Society, Vol. VII., p. 345); but whether this explanation be or be not the correct one, the

theoretical importance of the facts is considerable, inasmuch as they appear to be wholly irreconcilable with the hypothesis which would attribute the magnetic variations to thermic causation. We may ascribe to the general and almost exclusive prevalence of the thermic hypothesis, and to its influence on magnetic reasonings, that the well-known erroneous opinion was so confidently promulgated by a deservedly high magnetic authority,* that a line *must* exist surrounding the globe in which the needle would be found to have *no diurnal variation*. We have now, on the contrary, reason to be assured by the facts above referred to that there is no such line, but that everywhere in the regions of its supposed existence a diurnal variation subsists, having opposite characteristics in opposite parts of the year, as influenced by the sun's position on either side of the equator, and disappearing only at the epochs when the sun passes from south to north or from north to south declination.

Lunar Variation.—But if thermic relations have failed to supply a connecting link between the sun and those magnetic variations which are, without doubt, referable to the sun as their primary cause, the failure of that hypothesis is made still more obvious by the existence of variations governed by the *moon's* position relatively to the place of observation. We are indebted to Mr. Kreil, now holding the same position in Austria that I have filled in England, for the first suggestion of the existence of a lunar-diurnal variation of one of the elements, viz. the Declination, founded on observations at Milan and Prague; and in the present volume, pp. lxxviii—lxxxvi, will be found a complete exposition of the facts of the moon's diurnal influence on all the three magnetic elements at Toronto, viz. on the Declination, Inclination, and Total Force. In the case of this investigation also, notwithstanding the smallness of the values concerned, the instrumental means supplied to the Colonial Observatories have been found competent to determine with an approximation sufficient for present theoretical purposes, the character and amount *for each element* of the regular daily effect of the moon on the terrestrial magnetic phenomena, the existence of which does not appear to have been even suspected at the time when the Report of the Committee of Physics was drawn up. The *discovery* of the moon's influence on any of the magnetic elements is due, as already stated, to Mr. Kreil; but Toronto is the first, and as yet the only, station at which the numerical values at every lunar hour of the lunar-diurnal variations of the three elements have been published. Corresponding statements to that which has been given for Toronto will be given for St. Helena and Hobarton in the volumes of those Observatories which are now in preparation. All the results

* Arago, *Annuaire*, 1836, p. 284.

at the three stations present the same *general* characters. The lunar influence does not appear to partake in the decennial inequality which is found in all the variations depending upon the sun.—(Phil. Trans. 1857, Art. I.) The lunar-diurnal variation of each of the elements is a double progression in the 24 lunar hours, having epochs of maximum and minimum symmetrically disposed. In character, therefore, it differs from what might be expected to take place if the moon were possessed of inherent magnetism—*i.e.* if she were a magnet, as it is usually termed, *per se*—and accords with the phenomena which might be expected to follow if she were magnetic only by induction from the earth. On the other hand, it is believed that the *amount* of the variation, as observed at each of these stations, very far exceeds what can be imagined to proceed from the earth's inductive action reflected from the moon. In this theoretical difficulty, we are naturally thrown back to seek a more extensive knowledge of the phenomena than we have yet obtained, and to the generalisation which will follow when sufficient materials for it have been procured. In subordinate particulars a difference which is apparently systematic is perceived to exist in regard to the hours which constitute the epochs of maxima and minima at the three stations, as well as in regard to the amounts of the respective variations; these differences are no doubt intimately connected with the causes of the phenomena, and are likely to lead to their elucidation. It is therefore greatly to be desired that the number of stations furnishing complete determinations, such as the Colonial Observatories only have hitherto supplied, should be increased.

The domain of periodical variations has thus been considerably enlarged since the Report of the Committee of Physics was drawn up, and must henceforth be understood to comprise, in addition to the variations "whose amount is a function of the hour-angle of the sun, and of his longitude," [or of his declination] (Report, p. 10)—1°, those variations of the three elements whose amount is a function of the hour-angle of the moon; 2°, those variations which were classed in the Committee's Report as "irregular," or "apparently observing no law," but which are now known to be governed by laws depending on the sun's declination and hour-angle; and 3°, those variations, both "regular" and "occasional," which have their epochs and amounts dependent apparently on a solar period of not yet perfectly ascertained duration, manifesting itself also by periodical changes in the frequency and amount of the solar spots. With the exception of the last-named class, all these variations require for their generalisation that the phenomena should be investigated at several points of the earth's surface widely distant from each other; and we have now the knowledge, grounded on experience, that a very few years are sufficient for the observations at each station,

with the instrumental means and methods recommended by the Royal Society, and when the investigation is made a primary object by those who engage in it.

Absolute Values and Secular Changes.—But interesting and valuable as is the acquisition of a fuller and more precise knowledge of the comparatively small magnetic variations, produced at the surface of the earth by the action or influence of external bodies, even greater importance seems to attach, when *terrestrial magnetism* is in question, to the purposes of that distinct branch of the duties of a Magnetic Observatory, which consists in the determination of the absolute values and secular changes of the three magnetic elements. By the *absolute values* we seek to acquire a knowledge of the actual present order and distribution of the terrestrial magnetic influence at the surface of the earth, and to provide the materials by which the constancy, or otherwise, of the earth's magnetic charge may hereafter be examined; and by determinations of the present direction and amount of the *secular changes*, we seek to become acquainted with the laws, and ultimately with the causes, of that most mysterious change, by which the magnetic condition of the globe at one epoch passes progressively and systematically into that of another. It is specially by determinations of this class, obtained with the necessary precision in different parts of the globe, that (in the words of the Committee's Report) the "patient inductive inquirer" must seek to ascend to the general laws of the earth's magnetism." At the time when the Report of the Committee of Physics was written, doubts were reasonably entertained whether the limited time during which the Colonial Observatories were likely to be maintained in action would be sufficient for the determination of the secular changes; and it was therefore very properly urged, that "these changes" cannot be concluded from comparatively short series of observations without giving "to the observations *extreme nicety*, so as to determine with perfect precision the "mean state of the elements at the two extremes of the period embraced." It is with much satisfaction, and with a well-deserved recognition of the pains which have been bestowed by the successive Directors of the Toronto Observatory, and their assistants, to this branch of their duties, that I am able to refer to the determinations of the absolute values and secular changes of the three elements contained in this volume, in evidence that the instrumental means which were devised, and the methods which have been adopted, have proved, under all the disadvantages of a first essay, sufficient to determine these data with a precision which is greatly in advance of preceding experience, and, as far as may be judged, equal to the present requirements of theoretical investigation. It should, moreover, be noticed, that Toronto is a station where the casual and periodical variations, which it was apprehended would seriously

interfere with the determination of absolute values, are unusually large. We may derive, therefore, the greatest encouragement from the results thus obtained, to persevere in a line of research which is no longer one of doubtful experiment, and to give it that further extension which the interests of science require.

Amongst the results which have recompensed the labours of the Colonial Observatories in this branch of their inquiries, perhaps there is none of more general theoretical importance than the conclusion which has been established by means of the observations of the Declination at St. Helena, that the current annual amount of secular change takes place by *equal aliquot portions in every month, and even in every fortnight, of the year*. The magnitude of the annual change of the Declination at St. Helena, 8' (or more precisely 7'·93), in each of the eight years during which the observations were maintained, and the comparative tranquillity of the tropical regions in regard to magnetic disturbances, were circumstances which made St. Helena a particularly eligible locality for this investigation. The result has been to remove secular change conclusively and altogether from the category of atmospheric or thermic relations, with which, in the absence of a correct knowledge of the facts, it has frequently been associated, and to characterize it henceforward as a phenomenon of far more systematic order and regularity than had previously been generally apprehended.—(Proceedings of the Royal Society, vol. VII. pp. 67—75.)

It has thus been shown that in each and all of the branches of inquiry for which the institution of the Colonial Observatories was recommended they have accomplished the objects which were contemplated, and have in many respects exceeded the expectations on which the recommendation was founded. Nor has the scope of their performance been limited to a mere registry of the observations, or to their publication in a crude and undigested form. It was well remarked by an authority of the greatest weight, when addressing the British Association on the occasion of the assembly of the Magnetical and Meteorological Conference at Cambridge in 1845 (Herschel, Address, p. xxxv), that "a man may as well keep a register of his dreams as of the weather or any other set of daily phenomena, if the spirit of grouping, combining, and eliciting results be absent." To advance by the simple and straightforward path of inductive inquiry, in a science such as terrestrial magnetism in which a physical theory has yet to be sought, the endeavour must be made "to grapple with the palpable phenomena, seeking means to reduce their features to measurement, the measurements to laws, the laws to higher generalisations; and so step by step to advance to causes and theories." The mere observational part is not, and ought never to be, viewed as the fulfilment of the duties of institutions such as Magnetic Observatories;

those duties ought always to be held to include (either on the part of the Directors of the Observatories themselves, or on that of persons who, as Superintendents or otherwise, have constantly watched the progress of the work) "the systematic deduction from "the registered observations of the mean values, and of the local coefficients of diurnal, "annual, and secular change," because "no other class of persons stands in anything like "so favourable a position for working out the first elementary laws of phenomena, and "referring them to their immediate points of dependence," as those who have directed or superintended the processes by which the data required for the knowledge of the phenomena have been obtained. The introductory discussions prefixed to the several volumes which contain the observations of the Colonial Observatories,—and a succession of papers presented to the Royal Society and published in the Philosophical Transactions,—bear testimony to at least unsparing labour on the part of the Superintendent, to give a completeness to the experiment of Colonial Observatories corresponding to its original conception, though this portion of the duty might well have fallen into abler hands. One great advantage in the task has undoubtedly been enjoyed; viz. the union of the detailed knowledge above alluded to with the opportunity of generalisation, and consequent insight, afforded by results admitting of strict comparison and combination, obtained from well-selected stations at such distant points of the globe, and by a uniform system of observation.

It may be useful on the present occasion, that we should recall to more distinct recollection the views and opinions entertained by those who were the principal instigators of the proceedings by which the Royal Society became the responsible advisers,—and Her Majesty's Government the chief supporters,—of measures which have placed this country in the very conspicuous position of taking that lead in the advancement of certain branches of science which other nations were willing and desirous that she should take. These views cannot be better stated than in the words of one to whom all will be willing to concede pre-eminence, as well in counselling the recommendation to Government, as in conducting the several matters connected with it to a successful issue (Herschel, in Quar. Rev., No. CXXXI.):—"Great physical "theories, with their trains of practical consequences, are pre-eminently national "objects, whether for glory or utility. In effect, such they ought to be considered "by every nation calling itself civilized; and if we look to consequences, we have "only to point to the history of science in all its branches to show, that every great "accession to theoretical knowledge has uniformly been followed by a *new practice*, "and by the abandonment of ancient methods as comparatively *inefficient* and "*uneconomical*. This consideration alone we think sufficient to justify, even on

“utilitarian grounds, a large and liberal devotion of the public means to setting on foot
“undertakings and maintaining establishments in which the investigation of physical
“laws and the determination of exact data should be the avowed and primary object,
“and practical application the secondary, incidental, and collateral one. That the
“time is now fully arrived when other great branches of physical knowledge must be
“considered as entitled to share in that public support and encouragement which has
“hitherto fallen to the lot of astronomy alone, will, we think, be granted without
“hesitation by all who duly consider the present state and prospects of science. The
“great problems which offer themselves on all hands for solution—problems which
“the wants of the age force upon us as practically interesting, and with which its
“intellect feels itself competent to deal—are far more complex in their conditions,
“and depend on data which to be of use must be accumulated in far greater masses,
“collected over an infinitely wider field, and worked upon with a greater and more
“systematised power, than has sufficed for the necessities of astronomy. The collect-
“ing, arranging, and duly combining these data are operations which, to be carried
“out to the extent of the requirements of modern science, lie utterly beyond the
“reach of all private industry, means, or enterprise. Our demands are not merely for
“a slight and casual sprinkling to refresh and invigorate an ornamental or luxurious
“product, but for a copious, steady, and well-directed stream, to call forth from a
“soil ready to yield it an ample, healthful, and remunerating harvest. There are
“secrets of nature we would fain see revealed; resources hidden in her fertile bosom
“for the well-being of man upon earth, we would fain see opened up for the use
“of the generation to which we belong. But if we would be enlightened by the
“one, or benefited by the other, we must *lay on power*, both moral and physical,
“without grudging and without stint.”

If at the period when it was still doubtful what the Colonial Observatories, then just established, might be able to accomplish,—and when in effect the expectations from them were little more than the anticipations of what a voyage of discovery upon an unknown ocean might produce,—the propriety of embarking upon such investigations was thus unhesitatingly affirmed, how much more confidently may the duty of *perseverance* be insisted upon, when the results of the first experiment have already more than realized the expectations which caused it to be undertaken. They have indeed confirmed the belief that “the gigantic problem proposed to be resolved” is of a nature to yield in its full extent only to “continued and persevering inquiry,” but at the same time they may be said to have narrowed the field of inquiry, by showing more distinctly than was previously apprehended, both what is desired to be known,

and how and where it is to be sought. If the history of magnetical science is to be something more than a fragment, the researches must be persevered in.

In considering the means by which the researches thus opened out may be most advantageously prosecuted, it is natural that we should look in the first instance to the adoption, at other selected stations, of arrangements similar to those which were instituted at the stations which were chosen for a first, and, as it has proved, successful, experiment; and with this view, I may be permitted to restate the opinions which I submitted to the Magnetical and Meteorological Conference at Cambridge in 1845, as all that has since taken place has served to confirm those opinions:—

“Before I close this communication, I wish to advert to the expediency of
“extending the system of observation now in operation at Toronto, St. Helena, and
“the Cape of Good Hope, to other of the British colonies, where the same objects
“can be accomplished in an equally effective and economical manner.

“In cases where the institution of similar establishments is strongly urged by the
“Governor of a colony,—where competent persons are present and disposed to
“superintend the observations,—and where soldiers of the artillery are stationed,
“whose services may be available, and whose employment has been shown to be
“economical and effective in a high degree in the execution of a laborious and exact
“routine of observation,—there is wanting only a supply of instruments, the temporary allotment of a building to contain them, extra pay such as the individuals
“at the above-named Observatories receive, and an authorised connexion with a
“head-quarter establishment, whence they may derive instruction and guidance.

“The cost of one of the Ordnance Observatories (including 100*l.* a year for
“incidentals of all kinds) is 392*l.* a year, exclusive of publication. It may be
“assumed that five years of hourly observation is a sufficient time of continuance for
“obtaining in any particular colony the mean values of the magnetical and meteorological elements, and their diurnal, annual, and secular variations, as well as the
“peculiarities of climate bearing on the health and industrial occupations of man. If
“the observations were printed *in full detail* for the five years, they would occupy
“two quarto volumes; but if it were thought sufficient hereafter that duplicate or
“triplicate manuscript copies should be deposited in different public libraries, and
“that publication should be confined to abstracts and an analysis, the cost of the
“publication would form but a small addition.

“The colonies of Ceylon, New Brunswick, Bermuda, and Newfoundland are in the
“described case; their respective Governors are recommending the establishment of
“Magnetical and Meteorological Observatories in them; competent Directors are on
“the spot” (this was written in 1845); “and they are all artillery stations.”

To the four stations thus named may now be added Mauritius and Demerara, as from both these colonies strong and repeated applications to the same effect have been sent through their respective Governors to the Secretary of State for the Colonies. Both these colonies have offered to bear a portion of the expense of the proposed establishments, and have earnestly solicited to be placed in connexion with a head-quarter establishment, from which they might receive properly constructed instruments, with instructions and guidance in their use. Can it be said that we perform our duty as a mother country when we put such applications on the shelf?—whilst, in the interests of science, it would be difficult to estimate too highly the value of such institutions,—in forming good observers, who might subsequently extend their activity over a wider range,—in affording to travelling observers the opportunity of testing and correcting their instruments, as well as keeping up and perfecting their skill in observation,—and in contributing to arouse, to nourish, and to extend to other parts of natural knowledge that desire for the greatest possible accuracy, which was formerly met with only in astronomy and in geodetical operations of the highest class.

When it was first suggested that the officers and soldiers of the scientific corps of the army (Artillery or Engineers) stationed in the colonies might, both beneficially to themselves and advantageously to the public interests, be made available for the performance of such temporary services, the suggestion, from its novelty, might have been open to many objections. None were, indeed, made by the military authorities of the time, who, on the contrary, approved and encouraged the proposition. There may have been doubts entertained in other quarters whether persons, whose ordinary occupations were so dissimilar, would be found to possess the necessary qualifications for carrying out a scheme of exact and varied observation, in which there was no precedent to guide, and of which the performance would be sure to be extensively and closely scrutinized; but such doubts, if they existed, have probably long since subsided as the successive volumes of the Colonial Observatories have appeared; and if any should yet remain, the contents of the present volume, it is hoped, may entirely remove them.

One great and unquestionable advantage which future institutions of this nature will have over those whose duties are accomplished, will be found in the assistance they will derive from the *Physical Observatory of the British Association* at Kew, as a head-quarter Observatory, in which their instruments can be prepared and verified, the constants, &c. carefully determined, new instruments be devised as occasion may require, and be tested by experiment before they are sent out for use; and to which practical difficulties of all kinds which may present themselves to the Directors

INTRODUCTION.

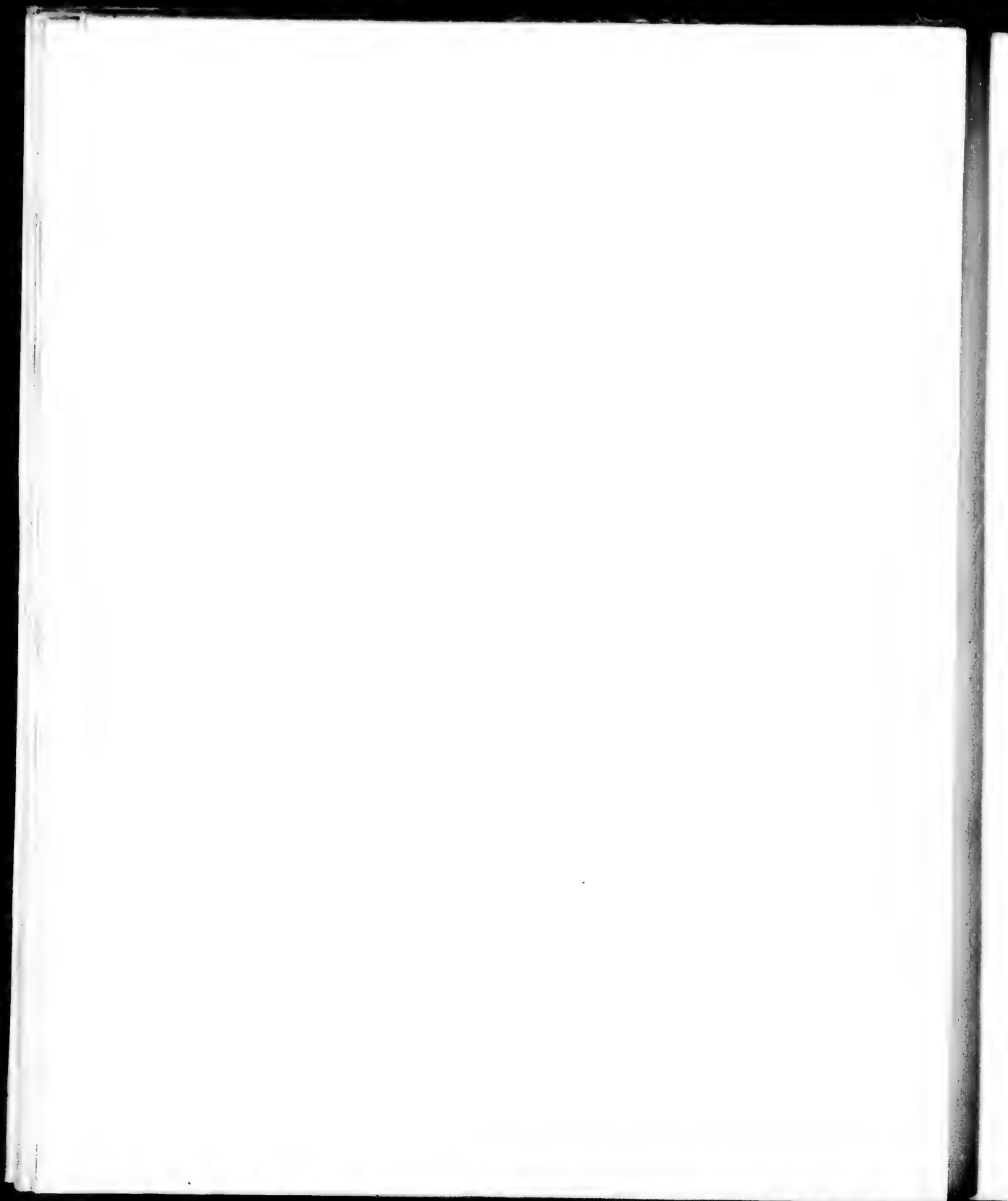
(xix)

may be referred. The omission of a provision of this kind, when the Observatories were first formed, was undoubtedly a great fault, which has been, and could only be, very imperfectly remedied by the Woolwich establishment, designed for a very different purpose, and of insufficient strength even for the duties for which it was designed.

The colonial establishments were first instituted at the instance of the Royal Society and British Association, with a more general concurrence and approval on the part of the cultivators of science in all parts of the globe than, it is believed, were ever before manifested in regard to any purely scientific undertaking; and with such a cordial and effectual co-operation of the public authorities as is well deserving of being held in remembrance. It is for those two great scientific bodies to consider whether any and what steps should now be taken to procure the continuance of the researches.

EDWARD SABINE.

Woolwich, March 1857.



ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

HORIZONTAL FORCE.

Separation and Analysis of the larger Disturbances.—An important preliminary step in this investigation must be the examination in the most direct and practical manner, *i.e.*, by means of the observations themselves, of the equivalent, in divisions of the scale of the Bifilar Magnetometer, to a change of temperature of 1° Fahrenheit.

From the latter end of 1843 to the termination of the hourly series in June 1848, we have an unbroken series of Bifilar observations particularly suitable for this examination, inasmuch as that interval comprehends the principal part of the observations which it is intended to employ in the purposed investigation. Collecting into one view the mean monthly scale readings and their corresponding temperatures from the general monthly tables of the Horizontal Force in vols. II. and III. of the Toronto Observations, we have as follows :—

TABLE I.

Month and Year.		Monthly Mean in Scale Divisions.	Temperature of the Magnet.	Quarterly Mean in Scale Divisions.	Quarterly Mean Temperature.	Seasons.
1843.	December -	514'94	43'95	} 519'96	41'73	Winter Quarter (1).
1844.	January -	525'33	37'95			
	February -	519'62	43'28	} 503'79	54'60	Spring Quarter (2).
	March -	512'61	46'29			
	April -	498'11	56'65	} 510'28	68'13	Summer Quarter (3).
	May -	500'67	60'85			
	June -	506'31	65'36	} 548'99	55'15	Autumn Quarter (4).
	July -	507'96	70'32			
	August -	516'58	68'72	} 577'93	42'61	Winter Quarter (5).
	September -	529'07	65'33			
	October -	552'37	53'25	} 564'20	53'73	Spring Quarter (6).
	November -	565'53	46'88			
	December -	577'33	42'40	} 551'88	71'07	Summer Quarter (7).
1845.	January -	576'39	42'52			
	February -	580'08	42'90	} 564'20	53'73	Spring Quarter (6).
	March -	571'22	47'97			
	April -	562'57	53'65	} 551'88	71'07	Summer Quarter (7).
	May -	558'82	59'57			
	June -	554'14	67'38	} 551'88	71'07	Summer Quarter (7).
	July -	548'70	72'45			
	August -	552'80	73'37			

(Continued on p. ii.)

TABLE I.—*continued.*

Month and Year.		Monthly Mean in Scale Divisions.	Temperature of the Magnet.	Quarterly Mean in Scale Divisions.	Quarterly Mean Temperature.	Seasons.
1845. (<i>cont.</i>)	September	570.93	63.24	586.61	58.90	Autumn Quarter (8).
	October	586.86	57.08			
	November	602.05	49.79			
	December	617.16	40.61			
1846.	January	611.77	44.84	614.15	42.74	Winter Quarter (9).
	February	613.53	42.78			
	March	601.03	50.25	591.39	55.99	Spring Quarter (10).
	April	593.09	54.53			
	May	580.05	63.18			
	June	575.55	69.10			
	July	571.16	74.19	573.11	72.51	Summer Quarter (11).
	August	572.61	74.25			
1847.	September	580.78	69.97	599.28	59.84	Autumn Quarter (12).
	October	602.27	56.70			
	November	614.80	52.86			
	December	635.55	43.25			
	January	640.48	40.17	636.43	41.93	Winter Quarter (13).
	February	633.26	42.37			
	March	627.88	44.70	616.78	52.36	Spring Quarter (14).
	April	616.15	51.56			
	May	606.31	60.82			
	June	606.51	64.46			
	July	590.43	73.64	597.24	69.72	Summer Quarter (15).
	August	594.77	71.07			
1848.	September	602.76	62.67	612.76	56.68	Autumn Quarter (16).
	October	615.17	56.05			
	November	620.34	51.31			
	December	636.98	45.17			
	January	636.08	43.31	636.56	44.15	Winter Quarter (17).
	February	636.62	43.98			
	March	633.50	46.86	625.39	54.06	Spring Quarter (18).
	April	625.18	53.36			
	May	617.48	61.96			

It is obvious on the first glance that, independently of variations in the scale readings from the influence of temperature, there was a progressive increase in the scale readings (though by no means regular or even uniformly progressive) from the commencement of the series to its close. According to the mode in which the Bifilar was adjusted, an increase in the scale reading should correspond to a decrease of force either in the earth's magnetism or in the magnetism of the Bifilar Magnet. In the latter case, (that of the decrease of the magnetism of the bar,) we have no reason to expect that the decrease should be regular or uniform; viz., of equal amount in equal times. Nor in respect to secular change in the magnetism of the earth could we venture to assume, in the present state of our knowledge, that the progress of such secular change, whether it were an increase or a decrease of the force, should be uniform. If, however, we except the increase in the scale readings between the spring and summer quarters in 1844, when, from some peculiar cause, it was greater than

ordinary, the departures from a uniformly progressive increase will not appear great, particularly when we take into account the influence of magnetic disturbances, and of the regular periodical variations in the earth's horizontal force in different parts of the year, by which the different quarters may have been influenced. If, therefore, we take the mean between the scale readings, and also between the temperatures in the winter quarters of 1843-1844 and 1844-1845, Nos. (1.) and (5.), and compare these means with those of the intermediate summer quarter in 1844, No. (3.), regarding the difference in the scale divisions $\left(\frac{519 \cdot 96 + 577 \cdot 93}{2} - 510 \cdot 28 = 38 \cdot 67\right)$ as the value in scale divisions corresponding to the differences of the winter and summer temperatures $\left(\frac{41^\circ \cdot 73 + 42^\circ \cdot 61}{2} - 68^\circ \cdot 13 = 25^\circ \cdot 96\right)$ we shall have $\frac{38 \cdot 67}{25 \cdot 96} = 1 \cdot 48$ as the scale equivalent to 1° Fahrenheit, a result subject only to inaccuracies which may be due to magnetic disturbances, or to irregularities in the decrease of magnetic force in the bar magnet, or to other causes which we are not able to particularize, which may have influenced the departures from uniformity in the progressive increase in the scale divisions during the period under consideration. In like manner, a combination of the spring and autumn quarters in 1844 with the intermediate summer quarter in the same year (Nos. (2.) and (4.) with No. (3.)) will yield a second result, but of comparatively less value than the first, because the differences of temperature between the summer and the mean of the spring and autumn quarters are less than between the summer and winter quarters. The eighteen quarters will thus yield fifteen results, which are as follow :—

TABLE II.

	Differences of Temperature.	Differences of Scale readings.	Equivalent of 1° Fahrenheit.
(1) and (5) with (3)	- 25'96	38'67	= 1'48
(2) and (4) with (3)	- 13'25	16'08	= 1'21
(3) and (7) with (5)	- 27'00	46'85	= 1'73
(4) and (6) with (5)	- 11'83	21'33	= 1'80
(5) and (9) with (7)	- 28'40	44'16	= 1'57
(6) and (8) with (7)	- 15'76	23'52	= 1'49
(7) and (11) with (9)	- 29'05	51'63	= 1'78
(8) and (10) with (9)	- 13'70	25'15	= 1'84
(9) and (13) with (11)	- 30'18	52'18	= 1'74
(10) and (12) with (11)	- 14'59	22'22	= 1'52
(11) and (15) with (13)	- 29'18	51'25	= 1'78
(12) and (14) with (13)	- 14'17	28'40	= 2'00
(13) and (17) with (15)	- 26'68	39'25	= 1'47
(14) and (16) with (15)	- 15'20	17'53	= 1'15
(16) and (18) with (17)	- 11'22	17'49	= 1'56
Sums	- 306'17	495'73	= 1'62

Whence $\frac{495 \cdot 73}{306 \cdot 17} = 1 \cdot 62$ is the equivalent in scale divisions to 1° of temperature.

The quarters into which the year is here divided are those usually called "Meteorological Seasons," December being classed with January and February, and August with June and July. By this division of the year the differences of temperature between the seasons compared are greater than if the more ordinary division had been adopted.

The partial results obtained by the comparison of the summer and winter quarters (which have the largest differences of temperature) exhibit a very satisfactory accord. There are seven such comparisons, and their results are as follow:—

TABLE III.

		Differences.		Equivalent to 1° .
		Temperature.	Scale-readings.	
(1) and (5) with (3)	-	25'96	38'67	Sc. Div. 1'48
(3) and (7) with (5)	-	27'00	46'85	1'73
(5) and (9) with (7)	-	28'40	44'16	1'57
(7) and (11) with (9)	-	29'05	51'65	1'78
(9) and (13) with (11)	-	30'18	52'18	1'74
(11) and (15) with (13)	-	29'13	51'25	1'78
(13) and (17) with (15)	-	26'63	39'25	1'47
		196'35	324'01	1'65

Whence $\frac{324 \cdot 01}{196 \cdot 35} = 1 \cdot 65$, the equivalent to 1° . The value which has been adopted in reducing the observations to an uniform temperature during the period under consideration is $1 \cdot 63$.

According to the method prescribed in the Instructions of the Royal Society, the equivalent in scale divisions for 1° of temperature should be obtained by dividing the change corresponding to 1° of temperature found by experiment in the magnetic moment of the Bifilar Magnet, by the scale coefficient or the value of one division of the scale, both being expressed in parts of the Horizontal Force. The first of these values (viz., q , = the change in the magnetic moment of the magnet for 1° of Fahrenheit) was found, by the experiments recorded in vol. II. p. liii, to be $\cdot 000234$ parts of the Horizontal Force; and that of the scale coefficient $k = \cdot 000087$, also in parts of the force (pp. li and lii). The change in the scale-readings corresponding to 1° of temperature should have been, therefore, $\frac{q}{k} = \frac{\cdot 000234}{\cdot 000087} = 2 \cdot 69$ scale divisions. This is the value which, in conformity with the instructions under which the colonial observatories have acted, has been employed in the discussion of the Bifilar observations in the preceding Toronto volumes. It is no doubt quite possible that the values of the temperature and

of the scale-coefficients, as determined by the experiments referred to, may have been, either one or both, slightly inaccurate; but it is scarcely possible to imagine inaccuracies, in either or in both, of sufficient importance to account for the difference between 2.69 and 1.63. The existence of a similar discrepancy in the case of the Makerstoun Bifilar has been shown by Mr. Broun in his very valuable discussion of the observations made at that observatory. The experiments by which the change in the magnetic moment of the bar, corresponding to variations of temperature, is determined, are made with the magnet *dismounted*; and it may be quite possible that the suspension may in some cases (if not in all the Bifilar Magnetometers of the description employed in the colonial observatories) exercise an influence in the changes of direction of the magnet produced by changes of temperature, which was not taken into account in the prescribed Instructions. Whatever may be the cause of the difference, however, there can, I apprehend, be no hesitation in preferring the result which is derived directly from the observations themselves.

The correct amount of this very important element in the reduction of the observations was the subject of earnest and even anxious consideration with Captain Lefroy during the latter part of his stay at Toronto, and led to an endeavour, after the hourly series had terminated, to ascertain the effect of changes of temperature on the readings of the Bifilar scale by a direct experiment with the magnet suspended precisely as when employed in the hourly observations. For this purpose the magnetometer was enclosed by boards extending from the floor to the ceiling, in a space sufficiently large to include also a copper stove. The scale was read by means of an aperture, which could be closed by a slider when not required. The account of this experiment, and its result, cannot be better related than by making the following extract from Captain Lefroy's report:—"The experiments were made by kindling a fire and keeping " up the temperature for three days, then allowing it to go out, and opening the " communication with the external air for the same length of time. There were five " cold and three hot alternations, each of three days. The readings were taken every " half-hour from 6 A.M. to 11 P.M., and at each reading the *small Bifilar*, which had " been in adjustment since December 1845, was also observed. It was hoped that the " small Bifilar would not show the changes of temperature of the other instrument, but " it was not found practicable to prevent the whole body of air in the room being " affected by these changes to some extent. Instead, therefore, of having a means of " correction independent of the temperature coefficient of the second instrument, we " have to reduce the small Bifilar readings to an uniform temperature by the employ- " ment of its own coefficient: but, in the first place, the value of $\frac{Q}{k}$ obtained for this " instrument in the ordinary way is more likely to be practically correct than that of " the other instrument, the suspension of the one being of silk and the other of metal; " and in the second place, the value of k given by adjustment for this instrument

“ (.0003551) agrees very nearly with the value found by deflection (.0003644);
 “ lastly, if the correction $\frac{q}{k}$ employed be somewhat in error, the result will be affected
 “ only by the difference between the actual and the assumed value, which cannot be
 “ important upon differences not exceeding 5° , as compared with the correction for
 “ differences averaging 61° with the other instrument. To compute the results two
 “ abstracts are formed, one containing the half-hourly observations on the fifteen cold
 “ days, the other those of the twelve hot days: by these we get two diurnal curves with
 “ both instruments, which must be exactly comparable as diurnal curves, the days being
 “ alternate. The differences between the corrected mean scale reading of the small
 “ Bifilar for the same hour of observation by the two diurnal curves is therefore the
 “ change of Horizontal Force which we have to eliminate before comparing the corre-
 “ sponding readings of the large Bifilar. Multiplying this difference by the ratio of the
 “ scale coefficients of the two instruments, and applying it as a correction to the second
 “ curve of the large Bifilar, the two curves of the latter instrument are reduced to the
 “ same values of the Horizontal Force, and the difference of scale reading between them
 “ is the residual effect of the change of temperature. We have then from the successive
 “ half-hourly observations a like number of equations; omitting the three first half-
 “ hours on each day, when it may be probable that the magnet may not have taken
 “ up the temperature indicated by the thermometer (the bulb of which was, however,
 “ close to it), we obtain, as the result of the whole, 1.74 as the equivalent in scale
 “ divisions for 1° of Fahrenheit.”

“ The inner case of gilt wood was removed, and the outer one was slightly raised by
 “ wedges to allow the air in the box to acquire the temperature of the rest of the room.
 “ There was no reason to suppose that currents of air affected the scale readings: there
 “ was no iron whatsoever about the stove, and it was always in the same position,
 “ whether heated or otherwise.”

That the result of these experiments should exhibit so close an approximation to
 the value (1.63) which has been found to represent the actual change produced in the
 readings of the scale by 1° of temperature in the whole body of the observations
 themselves, is a strong testimony to the care which must have been taken in conducting
 the experiments under the very difficult condition of regulating artificial temperatures
 in air heated by a stove.

The separation and analysis of the larger disturbances of the Horizontal Force has been
 conducted on the principle already described in discussing the larger disturbances of the
 Declination (Toronto Observations, vol. II. pp. xxii to xxxv). As the first step, the
 whole of the observations were reduced individually to a uniform temperature of 55° ,
 employing the coefficient named in the preceding pages (1.63); the *mean* scale division
 was then computed for every hour in each of the sixty months, and the correctness of the
 whole work was examined by the comparison of these hourly means with the hourly

means printed in the monthly tables, the latter being reduced to the standard temperature of 55° by the application in each case of the correction due to the difference between the recorded temperature and 55° .

The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Horizontal Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same hour and in the same month, and every observation which differed 14.0 scale divisions or more from that mean was provisionally marked as a disturbed observation. Fresh means for each hour in each month were then taken, omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the hourly means were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by 14.0 scale divisions or more.

The value of 14 scale divisions in parts of the Horizontal Force at Toronto was about .0012. When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence on the determination of the observations separated as disturbed.

A much greater practical difficulty has been occasioned by a circumstance already noticed in discussing the temperature-coefficient, namely, the progressive increase in the scale readings, partly from secular change and partly also from instrumental causes. Whenever the amount of increase in the course of a month was seen to be such as to interfere with the proper comparability of the observations in the earlier or later portions of the month with the means taken in the usual manner, fresh means, more suitable for the comparison, have been formed; thus, for example, for comparison with the observations in the last week of one month and the first week of the next, it has in some instances appeared preferable to form the hourly means from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained, that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the increase was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, have been substituted for the monthly or two-monthly means. This part of the process requires in the person who conducts it an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, correctly obtained, form an essential basis for the

study of all the terrestrial magnetic variations. To facilitate researches of this nature in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Horizontal Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded 14 scale divisions (or .0012 parts of the whole Horizontal Force,) is subjoined at the close of this discussion (pp. xviii to xxi), specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they have been derived.

The period which the hourly observations included in this investigation comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from its mounting, and employed in experiments designed to show the change in its magnetic moment occasioned by changes of temperature. It was remounted in February 1844; consequently the five months from October 1843 to February 1844 that would have made a *continuous* suite during the five years are deficient. These have been replaced (in the similar investigation to the present, in which the observations of the Vertical Force Magnetometer have been employed) by the observations of the same months of the preceding year, viz., October 1842 to February 1843. And as it is desirable that the five years submitted to this investigation should consist of identical months in the Horizontal and in the Vertical Force, the observations of the Horizontal Force during the months from October 1843 to February 1844 have been replaced by those of October 1842 to February 1843. It will be understood, therefore, that whenever in the subjoined pages the year ending June 30th 1844 is spoken of in reference to the Horizontal and Vertical Forces, (and to their theoretical equivalents, the Inclination and Total Force,) the months which constitute that year consist of July to September 1843 inclusive, October 1842 to February 1843 inclusive, and March 1844 to June 1844 inclusive.

The course that has been followed in working out the several parts of the process by which the larger disturbances of the Horizontal Force have been separated from the other observations, and the laws of their periodical variations shown, has been as follows:—The hourly observations of the Bifilar Magnetometer during the five years terminating June 30, 1848, were received at Woolwich from Toronto precisely in the state in which they appear in the 2d and 3d Toronto volumes; namely, the readings, uncorrected for temperature, at every hour of Göttingen time, arranged in monthly tables, accompanied by corresponding tables of the temperature of the Bifilar Magnet, shown by a thermometer of which the ball was enclosed in the same case with the magnet, and which was read contemporaneously with the Bifilar scale. The monthly tables of the scale readings and of the temperature were summed before their transmission to Woolwich, both in Vertical and Horizontal columns, and means

taken of all the days in the month at the different hours, and of all the hours of the day on the different days, forming "hourly means" and "daily means." In this state the Observations were received at Woolwich and printed; they were, in fact, printed from the original manuscripts.

The first step taken at the Woolwich office was to rewrite the whole of the observations of the five years in scale divisions, corresponding to the respective readings, but reduced to an uniform temperature of 55° , taken as a convenient approximate mean temperature; for this purpose each of the observations had to receive a correction proportioned to the difference between the recorded contemporaneous reading of the thermometer and the standard temperature of 55° , and computed by a coefficient representing the change in the scale reading produced by an alteration of 1° of the thermometer. The mode and process of deriving this coefficient from the observations themselves has been stated in pp. i to vi of this volume. The formation of the monthly tables of the "Scale Readings reduced to an uniform temperature of 55° " from the tables "uncorrected for temperature" was performed, under the superintendence of Mr. Magrath, the principal clerk in this office, by two non-commissioned officers, each working independently of the other, and having the correctness of the work proved by the accordance of the two independent computers; the daily and hourly means were then taken in the same manner by two independent computers, and were additionally checked by comparison with the daily and hourly uncorrected means calculated at Toronto, when these means were also reduced to the standard temperature of 55° [excepting in a very few instances in which the observations on days of *excessive* disturbance had been omitted in the sums and means of the uncorrected readings computed at Toronto, but were restored in the sums and means of the corrected tables]. The new tables thus formed, of the scale readings reduced to 55° , then passed into my hands; and having satisfied myself by a careful examination that a difference of 14 scale divisions above or below what might be taken as a normal value, (*viz.*, the mean value at the same hour during the same month, or for several preceding and several succeeding days,) would constitute a convenient minimum limit for the disturbances of largest amount—being on the one hand a greater departure from the normal value than could reasonably be ascribed to any other cause than that of a disturbance in the earth's magnetism, whilst on the other hand the number of disturbances that would be thereby separated would form a sufficient body to permit their periodical laws (if such existed) to be investigated—I proceeded to mark provisionally with a pencil every observation which differed 14 scale divisions or more from its normal. I then recomputed the normals omitting the observations provisionally marked as disturbed, and compared afresh all the observations, including the provisionally marked ones, with the new normals, altering the markings where required, and continuing this process until the normal in every case included every observation which differed less than 14 scale divisions from itself, and excluded every

observation which differed 14 scale divisions or more from itself; the latter were then marked finally with a surrounding ring in ink. In this state the tables were returned to the office, and the correctness of the markings, and of the normals excluding the larger disturbances, was examined by a separate computer.

A table was then formed by two computers working separately, and their work compared, of the marked disturbances during the five years, arranged chronologically, showing the day, the hour, and the amount of disturbance (*i.e.* the difference from the normal) in scale divisions; and on the receipt of this table from the office I proceeded to distribute the disturbances according to the years, months, and hours of their occurrence, separating them into disturbances increasing and disturbances decreasing the force, and forming the tables contained in the following analysis; the correctness of the distribution and of the calculations in each of the tables being in every case examined by a second person.

In the course of the process of marking the disturbances it became evident, as already remarked, that there were times, occasional but by no means frequent, when the change in the mean monthly scale reading, (*i.e.* the means of all the hours and all the days in the month from one month to the next,) was so considerable as to cause the regular hourly normals of the month to be inapplicable to the earlier or later portions of the month. In such cases the difficulty was met, and more suitable normals obtained for the earlier or later portions of the month, by taking the hourly means of the last fortnight of the one month and the first fortnight of the next, or by a mean of the normals of the two months combined; or in a very few instances, in which the departure from an uniformly progressive change was greatest, by normals derived from periods of less duration than a month.

The number of the Bifilar observations in which the amount of disturbance equalled or exceeded 14·0 scale divisions in the five years was 2968, being about 1 in between 12 and 13 of the whole body of the observations.

The aggregate values of the disturbed observations of the Horizontal Force in the different *years*, each ending June 30, are as follow—

TABLE IV.

Year ending June 30,						Ratios.
1844	-	-	8618·7	Sc. Div.	-	0·49
" " 1845	-	-	8032·4	"	-	0·45
" " 1846	-	-	9479·2	"	-	0·53
" " 1847	-	-	19700·1	"	-	1·11
" " 1848	-	-	42905·3	"	-	2·42
Total in the Five Years	-	-	88735·7	"	-	

The sum of the disturbances in the five years (88735·7 sc. div.) gives an annual mean of 17747·1 sc. div.; and calling this annual mean = 1·00, we obtain the ratios which the aggregate values in the different years bear to the average annual value. We find in this table a progressive increase in the annual value of the disturbed observations from the years ending in June 1844 and June 1845 to the year ending June 1848. The aggregate value in the year ending June 1844 exceeds by a small amount that of the year ending June 1845; but it will be remembered that the former of these two years included five months taken from the preceding year, namely, October 1842 to February 1843 inclusive, in consequence of the Vertical Force Magnetometer having been dismantled from October 1843 to February 1844 inclusive; and as we learn from the observations of the Declination at Toronto, (Vol. II. p. xxiii) that 1843 was a year of minimum disturbance in comparison with the years which preceded and followed it, it was to be expected that the aggregate value of the disturbed observations which stand in the table as corresponding to the year ending June 1844, should be swelled by the substitution of the disturbances in five months of a preceding year. It will be seen in the sequel, that when the months actually belonging to the year ending June 1844 are employed, the aggregate values, and consequently the ratio in that year, are *less* than in 1845.

Table V. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE V.

		Increasing.		Decreasing.	
Year ending June		-	-		sc. div.
1844	-	-	1963·9	6654·8	
" " 1845	-	-	1122·5	6909·9	"
" " 1846	-	-	1566·8	7912·4	"
" " 1847	-	-	2385·8	17314·3	"
" " 1848	-	-	5015·5	37889·8	"
Totals in the five years	-	-	12054·5	76681·2	

It appears from this table that the effect of the larger disturbances was in each year to diminish the Horizontal Force considerably more than to increase it. The ratio of the value of the disturbances decreasing the force to those which increased it was, on the average of the five years, nearly as 6·4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different *months* of their occurrence. The final column expresses the

ratio which the values in the preceding column bears to the mean monthly value or average of all the months :—

TABLE VI.

Months.	Year ending June 30,					Sums in the Five Years.	Ratios.
	1844.	1845.	1846.	1847.	1848.		
July	Sc. Div. 1092'6	Sc. Div. 190'6	Sc. Div. 630'2	Sc. Div. 1218'3	Sc. Div. 1383'1	Sc. Div. 4514'8	0'61
August	585'9	788'7	740'2	1609'6	1876'5	5600'9	0'75
September	300'4	1266'6	1211'7	3092'7	6739'9	12611'3	1'71
October	576'4	1201'8	575'7	2637'2	5931'9	10923'0	1'48
November	2004'6	1132'9	235'3	642'9	3225'0	7240'7	0'98
December	610'2	719'3	546'6	352'6	7174'8	9403'5	1'28
January	401'2	702'1	598'3	452'0	2112'8	4266'4	0'58
February	139'6	471'0	429'9	936'3	4941'7	6918'5	0'94
March	1122'3	422'0	895'3	1741'2	2721'0	6901'8	0'94
April	1223'9	611'1	1289'5	3731'2	4187'6	11043'3	1'50
May	456'4	369'8	1241'8	2515'7	2042'6	6626'3	0'90
June	105'2	156'5	1069'0	786'1	568'4	2685'2	0'36
Total in the five years						88735'7	
Mean monthly value						$\frac{88735'7}{12} =$	7395 = 1'00

April and September are the months of maximum disturbance, and January and June of minimum disturbance. The progression from the maxima to the minima and from the minima to the maxima are continuous, with the exception of the month of December; an exception obviously caused by the occurrence of excessive disturbance December 1847. If the year ending June 1848 be omitted, the ratios in December and January of the other four years to the average monthly disturbance in those four years are, of December 0'58 to 1, and of January 0'56 to 1. On the whole, therefore, we may conclude that in the larger disturbances of the Horizontal Force, as in those of the Declination (Toronto Observations, Vol. II. p. xxvi), the greatest amount of disturbance takes place at or about the equinoxes, and the least at or about the solstices. The amount of disturbance at the equinoxes (April and September) is to that at the solstices (January and June) in the proportion of between 3 and 4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different hours of their occurrence.

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TABLE VII.

Aggregate Values of the Disturbances, distributed into the different Hours of their Occurrence, with the Ratios of the Values at each Hour to the Mean Hourly Value or Average of all the Hours.

Toronto Astronomical Hours.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Hours.
	1844.	1845.	1846.	1847.	1848.			
18	335'6	201'8	200'8	879'1	2263'9	3881'2	1'00	6 a.m.
19	286'3	273'2	210'8	860'6	3507'9	5138'8	1'40	7 a.m.
20	178'6	171'5	297'5	716'0	2953'7	4317'3	1'20	8 a.m.
21	334'5	317'5	463'6	728'5	2203'0	4047'1	1'09	9 a.m.
22	563'3	446'2	411'3	770'2	1515'3	3706'3	1'00	10 a.m.
23	478'0	378'8	399'9	624'8	1570'2	3451'7	0'90	11 a.m.
0	475'9	415'9	386'3	606'5	1393'6	3278'2	0'87	Noon.
1	394'0	275'7	470'1	413'7	1249'6	2803'1	0'76	1 p.m.
2	395'1	264'7	242'3	540'5	1019'2	2461'8	0'66	2 p.m.
3	288'7	231'3	369'0	548'6	1015'8	2453'4	0'66	3 p.m.
4	345'5	141'5	327'6	522'7	929'4	2266'7	0'61	4 p.m.
5	421'6	322'6	260'4	629'0	902'1	2535'7	0'66	5 p.m.
6	367'9	187'9	326'4	517'5	774'7	2174'4	0'59	6 p.m.
7	353'7	351'0	259'3	480'5	1355'8	2800'3	0'76	7 p.m.
8	344'6	363'2	433'6	515'3	1111'1	2767'8	0'75	8 p.m.
9	459'0	366'3	504'6	1012'5	966'5	3308'9	0'90	9 p.m.
10	496'7	434'0	622'5	933'2	1324'1	3810'5	1'03	10 p.m.
11	322'3	285'1	556'9	1187'7	1851'7	4203'7	1'14	11 p.m.
12	293'8	537'0	625'3	990'5	2247'5	4694'1	1'22	Midnight.
13	366'1	544'9	544'8	1613'6	2597'8	5667'2	1'53	1 a.m.
14	399'9	458'1	464'5	1463'2	3155'7	5941'4	1'60	2 a.m.
15	248'5	390'3	532'0	1453'3	2427'5	5051'6	1'37	3 a.m.
16	212'8	311'4	317'1	938'6	2430'0	4209'9	1'14	4 a.m.
17	256'3	362'5	252'6	754'0	2139'2	3764'6	1'02	5 a.m.
Total in the five years						- - - 88735'7		
Mean hourly value						- - $\frac{88735'7}{24}$ =	3697 = 1'00	

When we examine the ratios presented in this table we at once perceive that the occurrence of the larger disturbances of the Horizontal Force at Toronto is regulated by periodical laws. The amount of disturbance is systematically greater at all the

hours from 10 P.M. to 10 A.M. inclusive, than at any hour from 11 A.M. to 9 P.M. inclusive. The ratios are equal to or above unity from 10 P.M. to 10 A.M. inclusive, and below unity from 11 A.M. to 9 P.M. inclusive. The maximum is at 2 A.M., and the minimum intermediately between 2 and 6 P.M., during which latter hours there is but little variation in the amount. There is also a secondary maximum about 7 or 8 A.M., preceded by a secondary minimum at 5 or 6 A.M. In the year ending June 1848 (but for that year only,) the secondary maximum at 7 A.M. was greater than at 2 A.M. (the usual hour of the principal maximum,) or than at any other hour in that year; this circumstance is chiefly due to the great disturbances which occurred in December 1847.

Tables VIII. and IX. exhibit the aggregate hourly values in the different years separated into disturbances increasing the force and disturbances decreasing the force; with the ratios at each hour to the respective mean hourly values.

TABLE VIII.

Disturbances increasing the Force.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	15'5	—	55'9	17'3	103'1	191'8	0'38	6 a.m.
19	45'5	—	—	16'2	54'3	116'0	0'23	7 a.m.
20	18'2	19'1	28'8	37'0	65'4	168'5	0'33	8 a.m.
21	86'6	87'5	118'3	32'6	147'5	472'5	0'94	9 a.m.
22	231'5	151'7	87'4	80'4	181'7	732'7	1'46	10 a.m.
23	203'9	138'7	89'8	173'9	351'2	957'5	1'90	11 a.m.
0	185'7	159'9	104'5	125'0	345'0	920'1	1'83	Noon.
1	158'0	99'1	123'3	74'4	331'4	796'2	1'57	1 p.m.
2	210'6	130'1	171'4	210'0	434'0	1156'1	2'30	2 p.m.
3	80'9	52'4	112'2	305'3	448'5	969'3	2'00	3 p.m.
4	189'4	17'6	227'6	292'6	530'4	1257'6	2'50	4 p.m.
5	183'9	53'2	117'8	381'9	374'2	1111'0	2'20	5 p.m.
6	72'5	—	82'7	150'6	131'7	437'5	0'85	6 p.m.
7	17'3	17'1	70'1	62'5	609'8	776'8	1'55	7 p.m.
8	31'4	50'5	66'2	26'5	362'8	537'4	1'07	8 p.m.
9	51'9	18'2	18'7	104'7	123'5	317'0	0'63	9 p.m.
10	92'8	55'7	—	93'7	101'0	343'2	0'68	10 p.m.
11	14'6	36'5	—	46'1	105'1	202'3	0'40	11 p.m.
12	—	49'2	30'6	36'3	100'2	216'3	0'43	Midnight.
13	—	—	—	66'0	50'9	116'9	0'23	1 a.m.
14	—	—	—	—	17'4	17'4	0'03	2 a.m.
15	28'3	—	—	35'0	14'9	78'2	0'16	3 a.m.
16	15'3	—	15'0	—	—	30'3	0'06	4 a.m.
17	30'1	—	32'5	17'8	31'5	111'9	0'22	5 a.m.
Total in the five years						12054'5		
Mean hourly value						$\frac{12054}{24} =$	502'2 = 1'00	

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TABLE IX.

Disturbances decreasing the Force.

Toronto Astrono- mical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	320'1	201'8	144'9	861'8	2160'8	3689'4	1'15	6 a.m.
19	240'8	273'2	210'8	844'4	3453'6	5022'8	1'57	7 a.m.
20	160'4	152'4	268'7	679'0	2888'3	4148'8	1'30	8 a.m.
21	247'9	230'0	343'3	693'9	2055'5	3574'6	1'12	9 a.m.
22	331'8	294'5	323'9	689'8	1333'6	2973'6	0'93	10 a.m.
23	274'1	240'1	310'1	450'9	1219'0	2494'2	0'78	11 a.m.
0	290'2	270'0	267'8	481'5	1048'6	2358'1	0'74	Noon.
1	236'0	176'6	346'8	339'3	918'2	2016'9	0'63	1 p.m.
2	184'5	134'6	70'9	330'5	583'2	1305'7	0'41	2 p.m.
3	207'8	178'9	256'8	243'3	567'3	1454'1	0'46	3 p.m.
4	156'1	123'9	100'0	230'1	399'0	1009'1	0'31	4 p.m.
5	237'4	269'4	141'6	247'1	527'9	1424'7	0'45	5 p.m.
6	293'4	187'9	243'7	366'9	643'0	1736'9	0'54	6 p.m.
7	336'4	333'9	189'2	418'0	746'0	2023'5	0'63	7 p.m.
8	313'2	312'7	367'4	488'8	748'3	2230'4	0'70	8 p.m.
9	407'1	348'1	485'9	907'8	843'0	2991'9	0'94	9 p.m.
10	403'9	378'3	622'5	839'5	1223'1	3467'3	1'09	10 p.m.
11	307'7	248'6	556'9	1141'6	1746'6	4001'4	1'25	11 p.m.
12	293'8	487'8	594'7	954'2	2147'3	4477'8	1'40	Midnight.
13	366'1	544'9	544'8	1547'6	2546'9	5550'3	1'73	1 a.m.
14	399'9	458'1	464'5	1463'2	3138'3	5924'0	1'86	2 a.m.
15	220'2	390'3	532'0	1418'3	2412'6	4973'4	1'56	3 a.m.
16	197'5	311'4	302'1	938'6	2430'0	4179'6	1'31	4 a.m.
17	226'2	362'5	220'1	736'2	2107'7	3652'7	1'14	5 a.m.
Total in the five years - - -						76681'2		
Mean hourly value $\frac{76681}{24} =$						3195'0 = 1'00		

We perceive by these tables that both the disturbances which increase and those which decrease the force are governed in respect to their frequency and amount by periodical laws depending on the solar hours, and that the laws are different in the two cases. The disturbances which increase the force have a maximum at 4 P.M., and a minimum from 2 to 4 A.M. There are also secondary maxima at 11 A.M., at 2 P.M., and at 7 P.M.; and secondary minima at 1, 3, and 6 P.M., unless we may regard these secondary maxima and minima as accidents which would disappear on a longer continuance of the observations.

From 10 A.M. to 8 P.M. inclusive the ratios are with a single exception above unity and from 9 P.M. to 9 A.M. inclusive without an exception below unity. It is in the hours

of the day, consequently, that the disturbances which increase the force have their greatest prevalence, whilst the hours of the night are comparatively tranquil. The converse law holds in regard to the disturbances which decrease the force; from 10 P.M. to 9 A.M. the ratios exceed unity at every hour, and from 10 A.M. to 9 P.M. they are uniformly less than unity. The maximum is at 2 A.M. and the minimum at 4 P.M. The continuous progression from the maximum to the minimum, and from the minimum to the maximum, undergoes an interruption of very marked character at 7 and 8 A.M., constituting a very decided secondary maximum in the disturbances which increase the force at those hours, which hours are not distinguished by any peculiarity in the disturbances of opposite character.

The table which follows (Table X., pp. xviii to xxi) shows the normal values finally adopted, the periods for which they have been employed, and the periods from which they have been derived. This table is the result of careful consideration; and is presented, not alone as one of the steps by which the conclusions arrived at in this volume have been obtained, but as a means of rendering the whole body of the Bifilar Observations in the five years more valuable for future enquiries than they would be without a table of this kind. Possessed of a table containing an approximate normal reading for every day and every hour, the inquirer has it in his power, by a simple comparison of the observations in the monthly tables, with the table of normals, to ascertain the state of the Horizontal Force relatively to its mean value on any particular day or hour to which his attention may be directed; he will have in such case only to correct the tabular scale reading in the monthly table to the standard temperature of 55° , by the aid of the coefficient 1.63 as the equivalent of 1° of Fahrenheit.

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TABLE X.

Hourly Means of the Readings of the Bifilar Magnetometer, reduced to an uniform Temperature of 55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equalled or exceeded 14 Scale Divisions or about .0012 parts of the whole Horizontal Force at Toronto.

TABLE X.

Hourly Means of the Readings of the Bifilar Magnetometer, reduced to an uniform Temperature of exceeded 14 Scale Divisions, or about .0012 parts

Periods to which the Hourly Means correspond.		GÖTTINGEN HOURS.											
		0	1	2	3	4	5	6	7	8	9	10	11
TORONTO HOURS.													
		18	19	20	21	22	23	0	1	2	3	4	5
1842:													
Oct. 1 to 31	-	449'3	446'6	442'8	434'2	429'6	429'3	431'0	435'5	441'7	444'6	446'6	447'2
Nov. 1 to 26	-	457'7	457'2	451'4	445'7	438'1	437'7	440'8	444'5	450'4	455'8	456'2	458'4
Nov. 27 to 30	-	462'6	462'1	459'0	454'5	447'6	445'2	447'0	450'4	455'6	460'5	462'6	463'7
Dec. 1 to 31	-	467'6	467'0	466'6	463'4	457'1	452'8	453'1	456'3	460'9	465'3	469'0	469'0
1843:													
Jan. 1 to 31	-	465'8	466'5	466'2	461'8	456'1	449'2	447'0	451'7	454'6	462'0	466'7	465'2
Feb. 1 to 9	-	469'3	469'9	466'6	464'1	460'1	457'4	457'9	462'1	464'2	470'2	475'5	473'5
July 2 to 15	-	904'6	903'8	902'6	909'0	899'7	899'8	905'6	907'3	912'5	915'5	919'0	916'8
July 16 to 29	-	928'1	927'0	927'8	925'4	922'3	925'4	930'5	934'4	938'5	943'3	940'0	939'3
July 30 to Aug. 12	-	949'9	948'2	942'1	938'1	940'5	944'6	947'2	953'7	957'1	960'8	960'1	962'5
Aug. 13 to 26	-	967'5	964'5	962'8	960'0	957'6	963'3	966'6	971'2	978'7	981'6	979'6	979'4
Aug. 27 to Sept. 16	-	987'1	986'5	980'8	975'2	976'5	979'5	980'9	980'7	995'7	999'1	995'4	992'9
Sept. 17 to 20	-	998'9	997'6	992'1	986'8	986'4	987'3	980'2	997'5	1002'2	1006'3	1006'2	1004'1
Sept. 21 to 30	-	1010'6	1008'6	1003'4	998'3	996'2	995'1	999'4	1004'3	1008'7	1013'5	1016'9	1015'2
Oct. 2 to 31	-	490'6	489'7	487'3	483'7	481'3	480'1	482'8	481'8	488'3	490'4	492'2	492'2
Nov. 1 to 30	-	496'8	495'6	492'9	489'5	488'7	488'9	484'1	490'8	493'8	496'3	497'6	498'4
Dec. 1 to 31	-	500'9	500'9	499'7	499'2	495'7	491'5	490'1	491'1	494'4	497'2	500'0	499'7
1844:													
Jan. 1 to 31	-	499'8	500'2	498'6	496'9	494'3	492'0	491'5	494'4	496'6	499'3	502'0	501'9
Feb. 9 to 29	-	503'2	502'7	500'7	499'5	499'7	499'4	500'3	501'7	504'1	506'4	506'7	505'9
March 1 to 31	-	504'2	501'2	498'0	496'9	494'2	492'1	491'6	494'0	498'8	504'4	504'5	504'1
April 1 to 30	-	503'1	503'7	501'2	497'6	494'8	493'6	494'5	499'3	505'0	508'5	508'0	518'8
May 1 to 11	-	506'7	506'7	504'2	500'0	497'6	498'6	500'3	505'4	510'3	513'6	513'6	514'5
May 12 to 25	-	510'3	509'6	507'1	502'5	500'4	501'6	506'1	511'5	515'6	518'6	519'2	518'1
May 26 to June 8	-	515'8	515'2	513'0	509'6	508'2	509'9	513'6	518'3	523'7	524'8	525'0	524'5
June 9 to 22	-	521'3	520'8	518'8	516'6	515'9	518'2	521'2	525'0	529'7	531'0	530'9	531'0
June 23 to July 6	-	527'4	527'3	525'9	520'3	517'3	520'3	525'2	529'3	534'2	536'6	537'1	536'2
July 7 to 27	-	533'5	533'8	528'9	523'9	518'8	522'4	529'1	533'6	538'7	542'3	543'3	541'4
July 28 to Aug. 3	-	537'2	536'0	531'3	525'4	521'2	524'8	530'9	536'5	541'5	546'4	546'4	544'5
Aug. 4 to 24	-	540'9	538'3	533'6	526'9	523'6	527'2	532'7	539'4	544'3	550'5	549'6	547'5
Aug. 25 to Sept. 7	-	545'1	542'5	537'4	531'4	528'3	531'5	537'0	544'0	549'3	552'8	553'1	551'4
Sept. 8 to 28	-	549'3	546'7	541'2	535'8	532'9	535'7	541'4	548'6	554'3	555'1	556'6	555'3
Sept. 29 to Oct. 5	-	551'7	549'6	544'6	539'4	536'2	538'4	542'8	548'4	553'6	555'3	556'8	556'7
Oct. 6 to 26	-	554'1	552'4	548'0	543'0	539'5	541'0	544'2	548'1	553'9	555'5	557'1	558'0
Oct. 27 to Nov. 2	-	555'5	554'3	551'0	547'0	544'0	548'5	546'0	549'0	554'4	556'6	557'6	558'2
Nov. 3 to 30	-	556'9	557'2	554'0	551'0	548'5	545'9	547'7	550'0	554'9	557'7	558'2	558'3
Dec. 1 to 31	-	561'4	560'4	560'2	559'1	556'4	550'7	552'4	555'1	556'7	559'9	563'0	561'8
1845:													
Jan. 1 to 31	-	560'3	560'4	556'9	551'3	546'0	546'9	548'4	552'3	555'2	557'8	560'2	560'1
Feb. 1 to 28	-	564'1	563'9	560'6	558'2	555'8	553'9	554'3	556'4	560'6	563'1	564'8	565'7
March 1 to 31	-	564'5	562'1	558'8	554'9	551'4	548'6	550'7	554'7	558'9	563'8	565'9	566'8
April 1 to 26	-	563'6	562'6	559'6	551'5	546'9	547'0	550'0	555'7	562'7	564'0	569'4	568'3
April 27 to May 10	-	565'1	564'5	561'1	554'6	551'6	552'2	555'6	561'0	567'1	569'3	572'9	572'2
May 11 to 24	-	566'7	566'4	562'6	557'8	556'3	557'5	561'2	566'4	571'5	574'6	576'4	576'1
May 25 to June 7	-	571'4	570'8	567'4	562'5	559'6	561'0	564'7	569'7	575'4	578'5	580'3	580'0

55° Fahr
of the who

12

6

Sc. Div.

446'6

459'1

463'4

467'7

464'4

471'3

916'9

936'7

958'8

976'4

991'0

1001'6

1012'2

490'3

497'5

499'8

500'7

505'8

503'9

507'6

511'1

514'5

521'3

528'2

533'5

538'8

541'5

544'2

549'1

554'0

554'3

557'5

561'1

567'4

564'0

564'0

566'9

569'3

571'8

576'4

HORIZONTAL FORCE: TABLE OF NORMALS.

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TABLE X.

Temperature of
out .0012 parts55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equalled or
of the whole Horizontal Force at Toronto.

10		11		GÖTTINGEN HOURS.												Periods from which the Hourly Means are derived.	
4		5		TORONTO HOURS.												1842:	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
446'6	447'2	446'6	444'3	443'9	445'2	444'9	445'5	445'4	447'0	446'1	449'4	448'7	448'4	448'4	448'4	Oct. 1 to 31.	
456'2	458'4	459'1	456'8	455'6	454'8	454'2	454'5	455'8	454'0	455'7	457'0	457'0	457'0	457'0	457'0	Nov. 1 to 26.	
462'6	463'7	463'4	462'5	461'0	459'8	459'4	458'5	458'6	459'0	460'0	460'0	461'7	463'4	463'4	463'4	Nov. and Dec.	
469'0	469'0	467'7	467'0	465'2	464'1	464'0	462'8	462'7	463'0	465'2	464'2	466'4	468'3	468'3	468'3	Dec. 1 to 31.	
466'7	465'2	464'4	463'4	462'9	461'5	461'2	461'1	461'1	461'7	462'3	463'3	464'8	465'9	465'9	465'9	1843:	
475'5	473'5	471'3	465'8	465'7	466'7	466'7	465'4	467'3	467'3	466'6	466'8	469'1	468'2	468'2	468'2	Jan. 1 to 31.	
919'0	916'8	916'9	914'7	910'5	911'0	909'0	907'5	905'8	906'9	906'7	906'8	904'7	902'5	902'5	902'5	Feb. 1 to 9.	
940'0	939'3	936'7	936'4	933'2	931'5	929'2	930'5	929'6	928'3	929'2	929'2	928'0	928'0	928'0	928'0	July 2 to 15.	
960'1	962'5	958'8	957'6	954'6	953'6	952'6	951'4	950'8	949'9	951'8	950'2	949'3	947'0	947'0	947'0	July 16 to 29.	
979'6	979'4	976'4	973'9	973'6	971'9	970'7	971'1	969'6	968'2	970'0	969'2	966'7	967'1	967'1	967'1	Aug. 13 to 26.	
995'4	992'9	991'0	990'8	990'5	989'0	987'7	986'8	986'2	986'9	986'5	984'6	986'5	985'5	985'5	985'5	Aug. 27 to Sept. 16.	
1006'2	1004'1	1001'6	1000'1	997'6	997'8	997'2	997'0	997'6	998'0	997'5	996'6	998'5	998'7	998'7	998'7	Sept. 1 to 30.	
1016'9	1015'2	1012'2	1009'4	1007'7	1006'6	1006'6	1007'2	1009'0	1009'2	1008'5	1008'5	1010'5	1011'9	1011'9	1011'9	Sept. 21 to 30.	
492'2	492'2	490'3	490'1	489'4	488'7	487'4	486'0	485'6	488'0	487'5	487'9	489'0	489'8	489'8	489'8	Oct. 2 to 31.	
497'6	498'4	497'5	496'5	494'7	494'9	493'1	492'7	493'5	492'9	494'0	493'3	494'3	495'8	495'8	495'8	Nov. 1 to 30.	
500'0	499'7	499'8	498'0	497'7	497'5	496'5	496'3	496'6	497'4	497'6	497'8	498'9	499'6	499'6	499'6	Dec. 1 to 31.	
502'0	501'9	500'7	500'2	500'5	498'6	497'9	497'8	497'1	497'3	497'4	498'3	499'1	499'6	499'6	499'6	1844:	
506'7	505'9	505'8	505'2	504'1	501'3	502'8	502'8	502'7	500'8	500'6	501'3	502'0	503'0	503'0	503'0	Jan. 1 to 31.	
501'5	501'1	503'9	503'4	502'4	502'8	501'2	500'7	500'3	500'5	500'3	500'4	501'5	502'9	502'9	502'9	Feb. 9 to 29.	
508'0	518'8	507'6	505'3	501'9	501'5	502'0	500'5	501'1	501'0	501'0	501'1	503'7	504'2	504'2	504'2	March 1 to 31.	
513'6	514'5	511'1	508'3	506'7	505'9	507'1	504'9	504'9	504'8	505'3	505'4	507'0	507'4	507'4	507'4	April 1 to 30.	
519'2	518'1	514'5	511'3	511'6	510'3	512'2	509'3	508'7	508'5	509'6	509'6	510'2	510'5	510'5	510'5	April and May.	
525'0	524'5	521'3	518'9	518'4	516'8	517'2	515'5	515'3	515'3	515'4	514'9	515'0	515'6	515'6	515'6	May 1 to 31.	
530'9	531'0	528'2	526'5	525'3	523'3	522'1	521'8	522'0	522'1	521'3	520'2	519'8	520'7	520'7	520'7	May and June.	
537'1	536'2	533'5	531'5	529'8	528'3	527'1	527'3	527'3	527'3	525'9	525'9	525'4	526'3	526'3	526'3	June 1 to 30.	
543'3	541'4	538'8	536'4	534'4	533'4	532'1	532'9	532'7	532'5	530'5	531'5	531'1	532'0	532'0	532'0	June and July.	
546'4	544'5	541'5	538'9	537'2	537'3	537'0	537'8	536'3	536'5	535'6	535'4	535'0	536'0	536'0	536'0	July 1 to 31.	
549'6	547'5	544'2	541'4	540'0	541'1	541'8	542'6	539'9	540'6	540'7	539'2	538'9	540'0	540'0	540'0	July and Aug.	
553'1	551'4	549'1	547'4	544'6	545'2	545'7	545'7	544'0	544'5	544'5	543'9	543'6	544'6	544'6	544'6	Aug. 1 to 31.	
556'6	555'3	554'0	553'4	549'2	549'3	549'6	548'7	548'2	548'3	548'4	548'6	548'4	549'2	549'2	549'2	Aug. and Sept.	
557'1	556'7	554'3	553'8	551'2	551'5	551'2	550'6	550'2	550'7	549'1	550'8	551'3	551'5	551'5	551'5	Sept. 1 to 30.	
557'6	558'0	554'6	554'2	553'1	553'7	552'8	552'4	552'2	553'0	549'8	552'9	554'1	553'8	553'8	553'8	Sept. and Oct.	
557'6	558'2	556'0	555'8	554'7	554'2	554'0	552'6	552'3	553'3	551'6	553'2	554'2	555'4	555'4	555'4	Oct. 1 to 31.	
558'2	558'3	557'5	555'8	556'2	554'6	555'2	552'9	552'4	553'6	553'4	553'6	554'2	557'0	557'0	557'0	Oct. and Nov.	
563'0	561'8	561'1	561'2	559'4	556'5	555'5	556'7	555'1	555'2	556'5	556'7	558'1	559'9	559'9	559'9	Nov. 1 to 30.	
560'2	560'1	557'4	558'7	557'7	557'7	558'7	557'8	557'2	556'7	556'8	556'5	558'1	557'4	557'4	557'4	Dec. 1 to 31.	
561'8	561'5	561'0	563'5	561'6	561'3	561'8	561'0	561'4	561'0	560'8	560'6	562'7	562'8	562'8	562'8	1845:	
565'9	566'8	564'0	563'7	564'7	563'7	562'4	561'4	561'9	561'3	561'0	560'9	562'5	563'1	563'1	563'1	Jan. 1 to 31.	
569'4	568'3	566'9	564'7	563'7	563'4	563'5	562'9	562'4	561'2	562'5	562'6	564'7	563'8	563'8	563'8	Feb. 1 to 29.	
572'9	572'2	569'3	567'7	565'8	564'2	564'3	564'1	563'8	562'9	563'9	563'8	565'4	564'8	564'8	564'8	March 1 to 31.	
576'4	576'1	571'8	570'8	568'0	565'2	565'2	566'6	565'2	564'7	565'3	565'1	566'1	565'8	565'8	565'8	April 1 to 30.	
580'3	580'0	576'4	574'4	572'1	570'2	570'0	570'1	568'9	568'4	568'8	568'6	569'5	570'0	570'0	570'0	April 1 to May 31.	

(Continued on p. xx.)

TABLE X.—continued.

GÖTTINGEN HOURS.														
Periods to which the Hourly Means correspond.	0	1	2	3	4	5	6	7	8	9	10	11	12	13
TORONTO HOURS.														
	18	19	20	21	22	23	0	1	2	3	4	5	6	7
1845:														
June 8 to 28 -	576'1	575'3	572'3	567'2	562'9	561'6	568'2	573'1	579'3	582'5	584'2	583'7	581'0	577'9
June 29 to July 5 -	577'3	576'6	574'2	568'8	565'3	565'9	570'0	575'0	580'2	583'8	585'0	584'2	582'0	579'9
July 6 to 26 -	578'5	578'0	575'9	570'4	567'8	567'3	571'9	577'0	581'2	585'1	585'8	584'8	582'9	581'0
July 27 to Aug. 2 -	581'4	578'6	576'3	571'6	569'3	570'3	575'2	580'1	585'3	586'5	589'5	587'5	586'1	583'0
Aug. 3 to 23 -	584'3	580'7	576'7	572'8	570'8	573'3	578'5	583'2	589'4	591'8	593'8	590'3	589'3	586'0
Aug. 24 to Sept. 6 -	585'9	582'7	578'3	574'6	572'2	574'6	580'3	584'9	590'6	591'8	593'2	591'0	589'8	586'0
Sept. 7 to 27 -	587'5	584'7	580'0	576'4	573'7	575'9	582'1	586'6	591'8	591'8	592'6	591'7	590'2	586'0
Sept. 28 to Oct. 4 -	589'0	588'9	585'2	582'2	580'7	581'6	586'0	588'9	592'7	594'0	594'5	593'2	591'6	589'0
Oct. 5 to 25 -	593'9	593'0	590'5	588'0	587'7	587'4	589'9	591'2	593'6	596'1	596'4	594'7	593'0	592'0
Oct. 26 to Nov. 8 -	596'0	595'4	591'5	588'5	586'9	586'2	588'2	590'6	593'7	595'8	596'5	595'5	594'7	594'0
Nov. 9 to 30 -	598'1	597'8	592'5	588'9	586'1	584'9	586'6	590'1	593'8	595'5	596'6	596'3	596'4	597'0
Dec. 1 to 31 -	596'7	597'2	597'0	593'9	591'4	589'8	587'5	589'2	591'5	596'3	598'3	598'5	596'8	595'0
1846:														
Jan. 1 to 31 -	597'7	597'9	596'7	594'4	589'1	586'5	586'9	591'7	595'9	601'1	602'5	602'0	600'5	598'0
Feb. 1 to 29 -	596'5	595'4	593'3	590'7	589'1	588'6	589'6	594'9	599'7	597'5	596'5	596'7	595'6	593'0
March 2 to 31 -	598'7	596'0	592'6	589'0	585'2	582'0	582'9	586'2	589'2	595'1	598'1	599'3	600'3	599'0
April 1 to 30 -	595'3	593'2	590'7	584'7	582'4	581'8	584'7	588'0	592'6	603'3	600'9	601'3	600'0	597'0
May 1 to 31 -	593'4	593'8	588'0	581'7	581'8	584'5	588'1	591'0	604'0	606'1	605'7	605'4	600'6	598'0
June 1 to 30 -	597'6	596'7	593'7	591'9	588'3	591'5	595'4	597'5	603'6	608'9	609'8	610'8	609'4	606'0
July 1 to 31 -	602'4	602'2	599'4	597'3	591'5	595'3	600'5	605'8	609'8	610'8	615'5	614'7	609'3	607'0
Aug. 1 to 31 -	605'6	604'4	597'7	592'3	593'7	594'4	602'3	610'5	615'0	618'1	618'1	616'2	609'5	604'0
Sept. 1 to 30 -	610'6	606'8	601'5	596'4	592'1	594'2	600'5	608'7	615'6	619'6	616'4	612'7	612'9	612'0
Oct. 1 to Nov. 1 -	613'7	610'0	605'2	600'9	598'8	597'5	600'2	604'7	608'3	611'6	614'0	612'4	612'3	613'0
Nov. 2 to 30 -	617'8	616'6	611'9	606'8	605'0	601'5	603'3	605'5	609'3	613'4	614'7	615'3	614'6	614'0
Dec. 1 to 31 -	620'6	620'1	617'1	614'8	610'7	607'0	607'0	609'8	614'8	619'4	621'2	620'6	619'5	619'0
1847:														
Jan. 1 to 31 -	619'2	619'2	618'8	615'6	610'8	607'3	607'7	611'0	614'9	620'5	621'1	622'1	621'8	619'0
Feb. 1 to 28 -	615'8	613'0	609'4	608'4	607'2	606'2	606'8	611'1	614'3	615'7	617'9	616'9	617'1	617'0
March 1 to 31 -	615'6	614'1	610'0	606'7	600'2	598'7	599'9	603'9	608'9	614'6	619'2	620'1	617'2	617'0
April 1 to 30 -	615'2	611'7	606'0	602'1	598'5	595'0	599'1	607'6	614'4	619'6	623'4	620'1	617'4	613'0
May 1 to 31 -	615'3	613'8	612'6	607'1	602'6	605'6	612'0	619'5	623'2	626'0	625'8	625'4	621'3	619'0
June 1 to 30 -	623'3	622'7	619'2	615'7	610'5	611'7	616'0	624'5	632'0	635'6	636'6	632'5	631'1	626'0
July 1 to 31 -	621'9	618'5	615'2	611'1	609'0	610'2	616'4	621'5	627'3	633'6	633'5	630'4	629'0	625'0
Aug. 1 to 31 -	623'1	621'9	615'5	610'1	607'0	606'1	611'2	617'8	627'7	632'0	632'6	632'8	628'9	627'0
Sept. 3 to 30 -	621'8	618'1	613'7	604'5	599'3	600'8	606'7	612'6	621'2	628'2	631'6	630'5	631'5	627'0
Oct. 1 to 31 -	620'1	618'9	610'9	607'9	603'4	602'5	606'9	611'5	615'0	619'1	621'9	624'5	623'9	624'0
Nov. 1 to 30 -	624'1	620'6	615'4	609'6	604'7	600'7	598'9	605'1	611'8	616'8	620'4	620'8	620'8	622'0
Dec. 1 to 31 -	629'7	628'8	627'6	623'2	617'9	614'5	614'7	616'1	617'2	618'3	622'9	624'7	627'0	625'0
1848:														
Jan. 1 to 31 -	624'4	623'5	621'8	622'0	608'2	601'7	602'7	608'5	611'5	620'3	626'7	625'9	624'6	621'0
Feb. 1 to 29 -	628'4	626'3	623'5	621'7	617'6	611'5	607'1	609'8	617'3	620'7	625'7	629'4	628'6	628'0
March 1 to 31 -	629'9	626'8	623'6	616'0	612'6	607'5	605'5	613'5	619'3	624'3	628'6	631'7	630'4	628'0
April 1 to 30 -	624'4	626'6	622'8	617'5	612'1	609'4	615'8	618'9	621'5	630'1	634'4	635'3	633'8	632'0
May 1 to 31 -	632'6	629'9	626'8	619'4	616'2	617'2	620'4	632'1	636'1	638'6	639'6	639'3	640'1	638'0
June 1 to 30 -	635'7	634'7	630'7	625'8	619'8	620'6	629'0	636'4	643'0	645'0	647'3	647'0	642'7	638'0

HORIZONTAL FORCE: TABLE OF NORMALS.

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TABLE X.—continued.

GÖTTINGEN HOURS.															Periods from which the Hourly Means are derived.
10	11	12	13	14	15	16	17	18	19	20	21	22	23		
TORONTO HOURS.															
4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
584'2	583'7	581'0	577'9	576'3	575'3	574'6	573'7	572'6	572'2	572'4	572'1	573'0	574'2	1845: June 1 to 30.	
585'0	584'2	582'0	579'5	577'9	577'0	575'6	575'0	575'8	574'6	575'1	574'5	575'1	576'0	June 1 to July 31.	
585'8	584'8	582'9	581'1	579'5	578'7	576'7	576'4	576'9	577'1	577'9	577'0	577'3	577'9	July 1 to 31.	
589'5	587'5	586'1	583'6	582'5	582'3	581'2	580'8	580'3	580'5	580'8	580'5	579'7	581'0	July 1 to Aug. 31.	
593'8	590'3	589'3	586'1	585'4	585'9	585'7	585'1	583'7	583'9	583'6	583'9	582'1	584'2	Aug. 1 to 31.	
593'2	591'0	589'8	586'4	586'0	586'7	587'0	586'8	585'2	585'0	585'3	585'5	584'8	586'2	Aug. 1 to Sept. 30.	
592'6	591'7	590'2	586'7	586'7	587'5	588'2	588'4	586'8	586'1	586'9	587'1	587'5	588'2	Sept. 1 to 30.	
594'5	593'2	591'6	589'4	589'5	589'1	590'3	589'6	588'7	589'5	589'8	589'6	590'7	591'5	Sept. 1 to Oct. 31.	
596'4	594'7	593'0	592'1	591'9	590'7	592'4	591'0	590'7	592'8	592'8	592'1	593'9	594'7	Oct. 1 to 31.	
596'5	595'5	594'7	594'6	594'5	593'2	594'2	592'3	592'5	593'2	593'4	593'8	595'3	595'7	Oct. 1 to Nov. 30.	
596'6	596'3	596'4	597'1	597'2	595'6	596'0	593'7	594'3	593'6	594'0	595'5	596'7	596'7	Nov. 1 to 30.	
598'3	598'5	596'8	595'9	595'7	595'5	596'0	594'8	594'1	594'6	594'6	594'6	595'1	595'1	Dec. 1 to 31.	
602'5	602'0	600'5	598'0	597'7	596'8	596'9	596'8	594'9	595'2	595'6	596'3	597'1	596'9	1846: Jan. 1 to 31.	
596'5	596'7	595'6	596'5	596'2	595'6	594'8	596'0	594'6	594'6	595'0	595'3	595'0	594'4	Feb. 1 to 29.	
598'1	599'3	600'3	599'7	598'5	597'5	598'1	597'8	596'5	596'5	597'2	597'2	598'9	597'9	March 1 to 31.	
600'9	601'3	600'0	597'2	596'5	595'3	595'1	595'0	593'4	593'9	593'5	596'4	596'2	595'8	April 1 to 30.	
605'7	605'4	600'6	598'6	595'6	593'2	593'9	593'2	593'2	591'0	594'0	591'7	593'1	593'7	May 1 to 31.	
609'8	610'8	609'4	606'6	600'8	597'0	598'6	596'4	596'0	597'5	598'4	598'0	596'8	598'1	June 1 to 30.	
615'5	614'7	609'3	607'5	600'9	603'2	602'4	600'5	599'3	601'5	601'1	600'1	600'1	600'0	July 1 to 31.	
618'1	616'2	609'5	604'3	604'1	605'0	602'1	602'8	606'5	605'9	606'9	605'9	604'6	605'4	Aug. 1 to 31.	
616'4	612'7	612'9	612'0	612'7	614'5	612'2	611'7	612'0	610'5	610'2	606'2	612'2	612'7	Sept. 1 to 30.	
614'0	613'4	612'3	613'2	611'4	612'3	610'9	608'8	608'3	609'9	611'0	612'2	612'8	613'4	Oct. 1 to 31.	
614'7	615'3	614'6	614'3	613'2	614'4	613'8	612'9	612'3	614'1	614'6	614'7	615'4	617'0	Nov. 1 to 30.	
621'2	620'6	619'5	619'0	619'1	619'4	619'7	618'0	616'6	617'8	618'6	618'1	618'7	619'3	Dec. 1 to 31.	
621'1	622'1	621'8	619'2	619'2	618'3	617'9	617'3	617'1	617'9	618'0	618'7	619'8	618'1	1847: Jan. 1 to 31.	
617'9	616'9	617'1	617'6	616'4	617'8	616'4	615'4	615'6	615'2	614'9	616'1	616'1	617'0	Feb. 1 to 28.	
619'2	620'1	617'2	617'0	616'8	615'6	614'8	614'7	615'7	612'8	612'3	613'1	613'8	614'0	March 1 to 31.	
623'4	620'1	617'4	615'2	609'4	611'4	610'5	611'6	613'4	613'1	610'7	611'8	613'2	614'2	April 1 to 30.	
625'8	625'4	624'3	619'8	616'9	618'2	617'0	617'3	615'7	616'4	614'4	614'2	614'2	614'4	May 1 to 31.	
636'6	632'5	631'1	626'3	623'1	621'1	622'1	621'1	619'8	619'0	620'8	620'7	620'8	621'4	June 1 to 30.	
633'5	630'4	629'0	625'1	625'2	623'2	621'8	622'6	620'3	621'0	619'8	619'8	619'3	619'6	July 1 to 31.	
632'6	632'8	628'9	627'4	626'7	625'7	625'2	626'1	625'5	624'2	624'6	623'5	623'9	623'4	Aug. 1 to 31.	
631'6	630'5	631'5	627'8	625'5	623'8	621'9	623'9	622'3	621'2	622'6	622'8	625'2	624'4	Sept. 3 to 30.	
621'9	624'5	625'9	624'4	621'9	620'9	621'0	620'7	619'9	619'5	620'8	620'9	620'9	621'5	Oct. 1 to 31.	
620'4	620'8	620'8	622'1	621'0	620'9	621'7	620'2	620'1	619'9	622'6	621'4	622'7	623'2	Nov. 1 to 30.	
622'9	624'7	627'0	625'7	624'8	626'5	625'3	625'3	624'2	624'8	625'4	626'0	626'6	626'6	Dec. 1 to 31.	
626'7	625'9	624'6	621'9	621'6	621'9	622'7	621'0	619'5	621'6	619'8	621'6	622'2	623'0	1848: Jan. 1 to 31.	
625'7	629'4	628'6	628'9	628'2	628'4	627'0	625'3	624'7	623'2	626'0	626'5	626'9	628'4	Feb. 1 to 29.	
628'6	631'7	630'4	628'8	627'3	625'1	625'9	626'2	626'0	625'7	627'8	627'4	626'8	627'9	March 1 to 31.	
634'4	635'3	633'8	630'5	628'9	628'0	627'1	626'6	627'2	628'6	627'2	629'1	627'6	629'1	April 1 to 30.	
639'6	639'3	640'1	634'6	633'2	633'4	631'9	631'7	631'8	630'1	630'6	629'8	628'6	630'0	May 1 to 31.	
47'3	617'0	642'7	639'4	637'8	637'4	634'1	632'1	633'4	632'0	632'8	631'5	632'8	632'6	June 1 to 30.	

VERTICAL FORCE.

Separation and Analysis of the larger Disturbances.—In preparing the observations of the Vertical Force Magnetometer for the various deductions that can be made from them, the first step must be to ascertain in the most direct and practical manner, from the observations themselves, the equivalent in divisions of the Magnetometer scale to a variation of 1° of temperature. Commencing with February 1844, in the middle of which month the Magnetometer was adjusted, an unbroken series continued until the end of May in the following year, when a re-adjustment took place. From March 1844 to May 1845 inclusive, we have consequently an unbroken series of fifteen months, in which the mean monthly scale readings, with the corresponding temperatures, were as follows:—

TABLE XI.

—	Sc. Divisions.	Temperature.	Sc. Divisions.	Temperature.	—
1844. March . .	121'8	46°5	102'93	54°5	Spring (1).
April . . .	99'0	56°5			
May . . .	88'0	60°5			
June . . .	75'1	64°8	64'60	67°6	Summer (2).
July . . .	60'2	69°7			
August . . .	58'5	68°3			
September . .	61'4	65°1	80'03	55°2	Autumn (3).
October . . .	83'6	53°4			
November . .	95'1	47°1			
December . .	101'1	42°7	97'97	42°77	Winter (4).
1845. January . .	99'5	42°7			
February . . .	93'3	42°9			
March . . .	82°9	48°0	71'20	53°67	Spring (5).
April . . .	72°1	53°6			
May . . .	58°6	59°4			

From the difference in the mean scale reading in the spring quarters of 1844 and 1845 ($102'93 - 71'20 = 31'73$) in which quarters the temperatures were nearly the same, we may infer that a considerable change took place in the scale readings during this interval from other causes than changes in the earth's magnetism; variations depending on particular periods of the year can have no place, since the seasons compared are the same, and any secular change which could be reasonably imagined must have been far less considerable. We must, therefore, attribute this decrease of $31'73$ scale divisions occurring in one year principally, if not wholly, to instrumental causes.

On a comparison of the *monthly* scale readings each with the others we further find reason to believe that the decrease thus occasioned was progressive during the whole interval, though not always to an uniform amount. Under these circumstances, perhaps the best mode of combining these five quarterly results with the view of

eliminating periodical and secular variations, and, as far as may be, instrumental error, and of thereby obtaining the effect of temperature, is to mean the results in the spring and autumn of 1844 (Nos. 1 and 3), and compare their mean with the intermediate summer (No. 2); and in like manner to mean the results of the autumn of 1844 and spring of 1845 (Nos. 3 and 5), and compare their mean with the intermediate winter (No. 4); and then to take a mean of the results of these two comparisons: these are stated in the following table:

TABLE XII.

		Difference of Temperature.	Difference of Scale Readings.	Equivalent to a Variation of 1° Fahr.
From (1) and (3) compared with (2) we have	-	12°75	26°85	2°10
From (3) and (5) compared with (4) we have	-	11°65	22°40	1°92

If we could regard these comparisons as sufficient of themselves to give a final result, we should only have to take the mean between them, 2°01, in which we might consider that any subsisting periodical and secular variations were eliminated. But the shortness of the period during which the series was unbroken, together with the magnitude and irregularity of the change from instrumental causes, will not permit us to rest in this as a final result, and we are led to seek for further evidence.

In examining the *monthly tables* in which the Vertical Force Observations from March 1844 to May 1845 inclusive are contained (Toronto Observations, vol. 2, pp. 224-243, 404-413), we find several instances in which the temperature of days very near to each other differed very considerably, and when consequently the effect of a change of temperature on the indications of the magnetometer can be examined with advantage. In choosing amongst these, it is obvious that the shorter the interval between the observations compared, the less the result is likely to be affected by the instrumental change which has been adverted to; and those instances are to be preferred in which a high temperature may be found between two nearly equidistant low temperatures, or a low temperature between two nearly equidistant high ones; provided that the condition of proximity be tolerably preserved, and that care be taken to avoid times of considerable magnetic disturbance. The following table presents a selection of instances made on these principles, with the results which they give individually and collectively:—

TABLE XIII.

DATES.	Mean Temperature.	Mean Scale Readings.	Differences.		Equivalent to a Variation of 1° Fab°.
			Temperature.	Readings.	
1844. March 12 and 13	50°77	Sc. Div. 116°13	} 10°67	Sc. Div. 17°72	Sc. Div. 1°66
18 and 19	39°46	133°64			
25 and 26	49°50	115°72			
1844. May 20 to 22	56°63	94°47	} 8°84	15°53	1°79
27 to 28	66°55	95°58			
June 10 and 11	58°80	87°75			
1844. September 16 to 20	71°47	48°92	} 15°52	29°02	1°87
23 to 27	55°95	77°94			
1844. October 21 and 22	50°80	87°33			
24 and 25	57°21	76°00	} 9°29	16°74	1°80
28 to 31	45°05	98°16			
1844. October 28 to 31	45°05	98°16			
November 4 to 8	50°69	89°48	} 8°54	14°02	1°64
25 to 28	39°25	108°83			
1844. November 25 to 28	39°25	108°83			
December 2 to 6	46°30	95°74	} 7°41	12°68	1°70
16 to 20	38°52	108°00			
1845. January 23 to 25	47°29	89°91			
February 1 to 7	34°44	109°50	} 14°39	25°09	1°74
21 to 26	50°37	78°92			
1845. March 11 to 13	48°54	80°36			
17 to 19	41°38	95°03	} 9°50	17°68	1°86
26 to 28	53°22	74°34			
1845. May 7 and 8	54°10	69°53			
12 and 13	68°67	40°93	} 13°27	25°55	1°93
15 and 16	56°70	63°42			
Collectively			97°43	174°03	1°78

From this table we have 1°78 as the equivalent in scale divisions to a variation of 1° temperature: or if we combine this with the result previously obtained from the five quarterly means (page xxiii), we have $\frac{174.03 + 49.25}{97.43 + 24.38} = \frac{223.28}{121.81} = 1.83$ sc. divisions, as the equivalent of 1°. The value adopted for the portion of the observations from March 1844 to May 1845 inclusive has been 1°80.

From June 1845 to August 1845 inclusive, and from September 1845 to March 1846, the Vertical Force Observations form two series, the break between them occurring at the end of August; each series is therefore of only a few months' duration. At the end of March 1846, the magnet was removed from the Magnetometer, remagnetised, and mounted afresh. The time of Horizontal Vibration, which had been previously 11°50, was reduced by the stronger magnetic charge imparted to the needle to 10°29 observed on 1st of April 1846; which was only increased to 10°36 when again observed on February 28th, 1849. The series of observations which was commenced in April 1846 continued without interruption to the close of the hourly observations in

June 1848, forming an unbroken series of twenty-seven months; and for this period it will be necessary to examine afresh the equivalent in scale divisions to a change of 1° of temperature, inasmuch as the equivalent must be expected to be slightly modified by the increased magnetism of the needle.

The mean monthly scale readings, with the corresponding temperatures, are as follow, and are collected in quarterly values:—

TABLE XIV.

Dates.	Scale Readings.	Temperature.	Quarterly Means.		Seasons.
			Readings.	Temperature.	
1846. April - -	214.0	54.7	} 199.3	62.0	Spring (1).
May - -	198.3	62.8			
June - -	185.7	68.6			
July - -	173.7	73.6	} 173.5	72.3	Summer (2).
August - -	170.8	73.7			
September - -	175.9	69.5			
October - -	197.1	56.6	} 202.6	50.8	Autumn (3).
November - -	200.6	52.8			
December - -	210.2	43.0			
1847. January - -	209.0	40.3	} 204.4	42.4	Winter (4).
February - -	203.4	42.3			
March - -	200.7	44.6			
April - -	188.9	51.4	} 174.2	58.5	Spring (5).
May - -	171.8	60.3			
June - -	161.9	63.9			
July - -	143.1	73.0	} 149.8	68.6	Summer (6).
August - -	145.4	70.4			
September - -	160.8	62.4			
October - -	172.5	56.1	} 180.2	51.0	Autumn (7).
November - -	179.8	51.6			
December - -	188.3	45.2			
1848. January - -	187.2	43.4	} 182.5	44.3	Winter (8).
February - -	182.5	43.9			
March - -	177.7	46.7			
April - -	165.9	53.3	} 149.5	61.0	Spring (9).
May - -	148.9	61.5			
June - -	133.7	68.2			

By comparing with each other similar seasons in different years, and thus eliminating periodical variations, whilst, at the same time, we have the temperatures approximately the same, we find that during this period, independently of changes from other causes, a progressive decrease took place in the scale readings which did not greatly differ from an uniform decrease. Without entering at present into the question of the cause of this decrease, let x = its amount taken from quarter to quarter, assumed to be uniform, and counted from the middle quarter (April, May, and June, 1847), and let y = the equivalent in scale readings for a change of temperature of 1° . Then each quarter will furnish an equation towards the values of x and y ; and by least squares we find the most probable value of x to be 6.43, and of y 1.64, the coefficient of x being positive in the quarters antecedent to April, May, and June, 1847, and negative in the

subsequent quarters; and the coefficient of y positive when the temperature is above $56^{\circ}\cdot 7$ (the arithmetical mean of the temperatures of the nine quarters), and negative when it is less than $56^{\circ}\cdot 7$.

Comparing the summer and winter quarters, or the quarters in which the differences of temperature are greatest, we have as follows:—

			Differences.		Equivalent of 1° .
			Scale Readings.	Temperature.	
Summer and Winter	{ (2) and (6) with (4)	-	42'75	28'05	} $\frac{86'4}{53'3} = 1'62$
	{ (4) and (8) with (6)	-	43'65	25'25	

Comparing also the spring and autumn quarters alternately with summer and with winter, we have as follows:—

			Differences.		Equivalent of 1° .
			Scale Readings.	Temperature.	
Spring and Autumn with Summer,	(1) and (3) with (2) -		27'45	15'90	} $\frac{88'5}{53'7} = 1'65$
"	Winter, (3) and (5) with (4) -		16'00	12'25	
"	Summer, (5) and (7) with (6) -		27'40	13'85	
"	Winter, (7) and (9) with (8) -		17'65	11'70	

The equivalent to 1° of temperature appears, therefore, to have been somewhat less in the period from April 1846 to June 1848 than in the period from March 1844 to May 1845; between these periods the needle had been re-magnetized, and its magnetic force increased, the times of Horizontal and Vertical vibration being slightly affected thereby (Toronto, vol. II. p. lxi). The ratio of the times of Horizontal and Vertical vibration being one of the elements upon which the change in the scale readings, corresponding to changes of temperature, depends, we should be prepared to expect that the amount of the equivalent to 1° of temperature would not be exactly the same before and after the re-magnetization, but that the equivalent would be slightly diminished in amount when the magnetic charge of the needle was increased. The two values, $1'80$ and $1'64$, differ from each other in the direction, and very nearly to the amount which might be expected from the change effected in the times of Horizontal and Vertical vibration. The results may be considered, therefore, as being each approximately corroborative of the other.

The value of the Scale-coefficient, k , computed according to the Instructions of the Royal Society, varied in different months between March 1844 and May 1845 from '000060 to '000065 parts of the Vertical Force, the mean being '0000628; and between April 1846

and June 1848 from '000065 to '000067, the mean being '0000658. Thence we should have, *theoretically*, the change in the magnetic moment of the needle corresponding to 1° of Fahrenheit, $'0000628 \times 1.80 = '000113$ for the first period, and $'0000658 \times 1.64 = '000108$ for the second period. There were two attempts made to obtain the change in the magnetic moment by direct experiment, one at the end of 1843 and beginning of 1844, of which the particulars are related in the Toronto Observations, vol. I. pp. liii-lvii, the result being '000112; and a second in March and April 1846, of which the particulars are given in vol. II, pp. lxii-lxiii, and of which the result was '00007. The result of the experiments in 1843 and 1844 ('000112) is in remarkable accord with the deduction obtained by the present investigation, '0001105 (mean of '000113 and '000108). The partial results in the second series, viz., in March and April 1846, accord better with each other than do those of 1843-1844; but it is possible that there may have been some accidental oversight causing an error which may have pervaded the whole. The needle itself has been since transferred, by direction of Her Majesty's Government, to the provincial authorities of Canada, and remains at Toronto in what is now a provincial observatory; it has not been possible, therefore, to repeat the direct experiments on its magnetic moment at Woolwich, which would otherwise have been done. It would have been satisfactory to have *proved* by this means, what is, however, extremely probable, that in the case of the Vertical Force needle the method of determining the temperature equivalent prescribed in the Instructions, and that which has been here adopted, of deriving it from the observations themselves, lead to an identical conclusion.

The separation and analysis of the larger disturbances of the Vertical Force has been conducted on the same principle as in the case of the larger disturbances of the Horizontal Force. As the first step, the whole of the observations were reduced individually to an uniform temperature of 55°, employing the coefficients named in the preceding pages. The *mean* scale division was then computed for every hour in each of the sixty months; and the correctness of the whole work was examined by the correspondence of two computers, and by the agreement of these hourly means with the hourly means printed in the monthly tables, when the latter were reduced to the standard temperature of 55° by the application in each case of the correction due to the difference between the recorded temperature and 55°. The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Vertical Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same temperature, hour, and month, and every observation which differed 4.0 scale divisions or more from that mean was provisionally marked as a disturbed observation.

Fresh means for each hour in each month were then taken omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the "hourly means" were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by four scale divisions or more. (The value of four scale divisions in parts of the Vertical Force at Toronto was '00026.)

When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence in the determination of the observations separated as disturbed.

A much greater practical difficulty was occasioned by a circumstance already noticed in discussing the temperature coefficient; namely, the progressive decrease in the scale readings from instrumental causes, and possibly also in part from secular change. Whenever the amount of decrease in the course of a month was seen to be such as to interfere with the proper comparability of the observations in any part of the month with the means taken in the usual manner, fresh means more suitable for the comparison were formed; thus, for example, for the observations in the last week of one month, and the first week of the next, it has in some instances appeared preferable to form the hourly means for comparison from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the decrease was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, were substituted for the monthly or two-monthly means. This part of the process requires an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, however obtained, form an essential basis for the study of all the terrestrial magnetic variations. To facilitate researches of this nature, in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Vertical Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded four scale divisions (or '00026 parts of the whole Vertical Force at Toronto), is subjoined, (pp. xxxviii to xli) specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they are derived.

The period which these normal values comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from

its mounting, and employed in experiments designed to show the change in its magnetic moment occasioned by changes of temperature. It was remounted in February 1844; consequently the five months from October 1843 to February 1844 that should have formed a continuous suite are deficient. These have been replaced by the observations of the same months of the year preceding, viz., October 1842 to February 1843.

It will be understood, therefore, that, throughout the discussion of the Vertical Force disturbances, whenever the year ending June 30th 1844 is named, the months which constitute it consist of July to September 1843 inclusive, October 1842 to February 1843 inclusive, and March 1844 to June 1844 inclusive.

The number of the Vertical Force observations in which the amount of disturbance equalled or exceeded 4·0 scale divisions in the five years was 5220, being about 1 in 7 of the whole number of observations.

The aggregate values of the disturbed observations of the Vertical Force in the different years, each ending June 30th, are as follow:—

TABLE XV.				
Year ending June 30, 1844	-	-	-	7008·5 Scale Divisions.
" " 1845	-	-	-	6201·1 "
" " 1846	-	-	-	7839·1 "
" " 1847	-	-	-	13055·7 "
" " 1848	-	-	-	19161·5 "
Total in the five years	-	-	-	<u>53265·9</u>

Table XV. shows a progressive increase in the annual value of the disturbed observations from the years ending in June 1844 and 1845 to the year ending June 1848. The aggregate value in the year ending in June 1844 exceeds by a small amount that of the year ending June 1845; but it must be remembered that these two years do not admit of strict comparison with each other, because the first included five months taken from a preceding year, in consequence of the magnetometer being dismounted from October 1843 to February 1844 inclusive. If, as there is reason to believe, 1843 was a year of minimum disturbance (as was certainly the case in the Declination and Horizontal Force), it becomes probable that the amount of disturbance in the Vertical Force in the year ending June 1844 may have been swelled by this substitution of five months from the preceding year.

The sum of the disturbances in the five years (53265·9 scale divisions) gives an annual mean of 10653·2, and hence we obtain the ratios which the aggregate values in the different years bear to the average annual value, as shown in the following table:—

TABLE XVI.				
Year ending June, 1844	-	-	-	0·65 to 1.
" " 1845	-	-	-	0·58 to 1.
" " 1846	-	-	-	0·73 to 1.
" " 1847	-	-	-	1·23 to 1.
" " 1848	-	-	-	1·80 to 1.

Table XVII. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE XVII.

		Increasing.		Decreasing.	
Year ending June, 1844	-	-	3174.2	-	3834.3
"	"	1845	-	-	2061.2
"	"	1846	-	-	3356.1
"	"	1847	-	-	4372.9
"	"	1848	-	-	9298.3
Sums in the five years		-	22262.7	-	31003.2

It appears from this table that the average operation of the disturbances of larger amount at Toronto is to diminish the Vertical Force more than to increase it. The ratio of the disturbances diminishing the force to those which increased it, on the average of the five years, was nearly as 1.4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the several *months* of their occurrence, with the ratios which the values in the preceding columns bear to the mean monthly value or average of all the months.

TABLE XVIII.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	527.3	351.1	562.3	1406.8	637.3	3485.0	0.71	July.
August	291.3	760.1	808.1	2075.1	880.8	4805.6	1.08	August.
September	536.9	1115.0	625.2	2369.5	2434.4	7081.0	1.60	September.
October	489.9	1017.1	463.3	1125.7	2663.6	5759.6	1.29	October.
November	589.7	666.1	524.8	408.3	1138.2	3327.1	0.75	November.
December	794.7	198.6	659.4	149.3	2611.3	4413.3	1.00	December.
January	381.3	652.2	301.7	313.0	841.1	2492.3	0.56	January.
February	72.8	346.8	266.7	508.0	2093.0	3287.3	0.74	February.
March	1283.7	345.1	374.3	1163.2	1619.6	4785.9	1.08	March.
April	1374.4	249.5	1048.3	2034.5	1901.7	6698.4	1.49	April.
May	490.5	382.7	1347.2	1081.9	1683.1	4985.4	1.12	May.
June	182.8	116.8	857.8	420.4	657.2	2235.0	0.50	June.
Total in the five years						53265.9		
Mean monthly value,						$\frac{53265.9}{12}$	=	4438.8 = 1.00

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April and September are the months of maximum disturbance, and January and June the months of minimum disturbance. The progression from the maxima to the minima, and *vice versa*, is continuous with the exception of December, an exception manifestly caused by the occurrence of excessive disturbance in December 1847. If the year ending June 30, 1848, be omitted, the ratios of the disturbances in the months of December and January respectively, to the mean monthly disturbance in the remaining four years are, December 0·63 and January 0·58. On the whole, therefore, we may conclude, that in the disturbances of the Vertical Force, as in the Declination and Horizontal Force, the maxima occur at or about the equinoxes, and the minima at or about the solstices. The values of the disturbances at the equinoxes are to those at the solstices in the ratio of nearly 3 to 1.

Tables XIX. and XX. exhibit the aggregate monthly values in the different years, separated into disturbances increasing the force, and disturbances decreasing the force.

TABLE XIX.

Disturbances increasing the Force.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.		
July . .	214·0	25·7	153·3	362·3	279·5	1034·8	0·55	July.
August .	83·2	281·3	236·1	442·0	363·1	1408·7	0·76	August.
September .	309·2	149·1	133·1	779·5	1395·5	2766·4	1·49	September.
October .	256·5	278·5	278·7	344·0	1151·2	2308·9	1·23	October.
November .	245·8	250·2	63·2	137·7	828·4	1525·3	0·82	November.
December .	685·3	126·7	454·2	117·2	1356·1	2739·5	1·48	December.
January .	144·9	460·4	110·3	232·5	368·3	1316·4	0·71	January.
February .	58·1	89·0	60·5	268·8	958·1	1433·5	0·77	February.
March . .	506·8	159·9	208·1	587·9	782·1	2244·8	1·21	March.
April . .	95·9	109·9	679·2	637·6	790·1	2712·7	1·46	April.
May . . .	128·2	95·1	656·1	227·6	722·4	1829·4	0·90	May.
June . . .	46·3	33·4	323·3	235·8	303·5	942·3	0·51	June.
Total in the five years . . .						22262·7		
Mean monthly value, $\frac{22263}{12}$ =						1855·2 =	1·00	

TABLE XX.

Disturbances decreasing the Force.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July -	Sc. Div. 313'3	Sc. Div. 325'4	Sc. Div. 409'0	Sc. Div. 1044'5	Sc. Div. 358'0	Sc. Div. 2450'2	0'95	July.
August -	198'3	475'8	572'0	1633'1	517'7	3396'9	1'31	August.
September -	227'7	965'9	492'1	1590'0	1038'9	4314'6	1'65	September.
October -	233'4	738'6	184'6	781'7	1512'4	3450'7	1'33	October.
November -	343'9	415'9	461'6	270'6	309'8	1801'8	0'68	November.
December -	109'4	71'9	205'2	32'1	1255'2	1673'8	0'63	December.
January -	239'4	191'8	191'4	80'5	472'8	1175'9	0'45	January.
February -	14'7	258'8	206'2	239'2	1134'9	1853'8	0'69	February.
March -	776'9	185'2	166'2	575'3	837'5	2541'1	0'98	March.
April -	878'5	139'6	369'1	1396'9	1111'6	3895'7	1'55	April.
May -	362'3	287'6	691'1	854'3	960'7	3156'0	1'22	May.
June -	136'5	83'4	534'5	184'6	353'7	1292'7	0'50	June.
Total in the five years -						31003'2		
Mean monthly value, $\frac{31003'2}{12}$ =						2583'6	=	1'00

It is seen by Tables XIX. and XX. that the values of the disturbances which increase the force, and of those which decrease the force, follow, in their ratios to their respective mean monthly values, the same general law as that obtained from their conjoint consideration in the remarks on Table XVIII. The equinoxes are the epochs of maxima, and the solstices of minima.

It has been seen in page xxx. that, on the average of the whole year, the disturbances which decrease the force preponderate in value over those which increase the force in the ratio of 1'4 to 1'0. This preponderance, however, appears to be subject to a periodical variation, and to have a maximum about the time of the northern solstice, and a minimum at the opposite period of the year. This variation is of considerable amount; and though the number of years (five) over which the series of observations extends is insufficient to give its progression with great regularity, it is still quite sufficient to indicate the general fact of the existence of such a variation, and to point it out as worthy of a more extensive examination. Table XXI. exhibits the ratios in the different months of the values of the disturbances decreasing the force to those which increase it, the latter being taken throughout as the units.

TABLE XXI.

Ratios of the Values of the Disturbances decreasing the Vertical Force in the different Months to the Value of those which increase it.

Months.	Ratios.	Months.	Ratios.
July - - -	2'33	January - - -	0'89
August - - -	2'41	February - - -	1'29
September - - -	1'56	March - - -	1'13
October - - -	1'49	April - - -	1'43
November - - -	1'18	May - - -	1'72
December - - -	0'61	June - - -	1'37

In December and January the preponderance of the decreasing values ceases, and increasing values preponderate. If we combine in one view the north-solstitial months of May, June, and July, the mean ratio is 1'8 to 1'0. In the opposite part of the year (combining November, December, and January in one view,) the preponderance is reversed, the mean ratio being as 0'83 to 1'0. In the comparison of the values of the easterly and westerly disturbances of the Declination at Toronto (Toronto Observations, vol. II. p.xxvii), we have the evidence of an analogous periodical variation existing in that element. In the north-solstitial months, easterly disturbances preponderate, and in the south-solstitial months westerly predominate. In the analogy thus traced the predominance of easterly disturbances of the Declination ranges itself with the predominance of disturbances which decrease the Vertical Force, and the predominance of westerly disturbances of the Declination with that of disturbances which increase the Vertical Force.

On comparing with each other the periodical affections of the Vertical Force in the different months which have been thus brought into notice, we find that in the sums of the values of the *whole* disturbances (when those which decrease are combined with those which increase the force) the equinoctial months are the epochs of maximum disturbance, and the solstitial months epochs of minimum disturbance; whilst in the periodical variation of the ratios of the disturbances of opposite character to each other (viz., those which decrease and those which increase the force,) the extreme dissimilarity takes place at or near the solstitial epochs, whilst the equinoctial epochs hold a middle place. In both these respects the analogy holds in respect to the disturbances of the Declination.

Table XXII. exhibits the aggregate values of the disturbed observations, distributed into the several *hours* of their occurrence, together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XXII.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
n.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	398'3	363'5	306'8	633'0	994'9	2696'5	1'21	6 a.m.
19	365'7	241'9	245'3	563'7	1149'8	2566'4	1'15	7 a.m.
20	273'7	188'6	262'5	455'4	598'4	1778'6	0'80	8 a.m.
21	207'8	109'3	129'7	261'4	483'4	1191'6	0'54	9 a.m.
22	183'6	57'3	111'7	131'5	329'0	813'5	0'36	10 a.m.
23	112'8	65'3	102'0	120'0	355'8	755'9	0'34	11 a.m.
0	145'1	58'2	188'1	191'3	454'6	1037'3	0'46	Noon.
1	207'7	106'6	219'4	305'6	555'1	1400'1	0'63	1 p.m.
2	213'1	159'0	260'6	342'9	720'8	1704'4	0'77	2 p.m.
3	221'1	160'6	317'2	512'1	716'3	1944'1	0'87	3 p.m.
4	290'4	200'7	439'0	510'9	884'4	2325'4	1'04	4 p.m.
5	342'4	260'4	397'5	522'2	864'6	2387'1	1'07	5 p.m.
6	329'0	228'8	369'1	556'5	757'2	2240'6	1'01	6 p.m.
7	319'6	244'6	302'0	517'5	885'3	2339'0	1'05	7 p.m.
8	274'7	223'2	256'6	433'8	789'2	1977'5	0'89	8 p.m.
9	204'2	196'7	291'5	361'6	602'4	1656'4	0'74	9 p.m.
10	245'4	181'0	283'9	645'9	539'6	1895'8	0'85	10 p.m.
11	277'7	227'9	314'9	585'0	660'2	2065'7	0'93	11 p.m.
12	401'0	484'1	467'5	784'0	957'6	3094'2	1'39	Midnight.
13	366'5	469'5	486'2	1032'1	1161'9	3516'2	1'58	1 a.m.
14	373'3	520'4	537'5	961'5	1171'4	3564'1	1'61	2 a.m.
15	421'0	566'2	591'1	991'7	1273'1	3846'1	1'73	3 a.m.
16	294'8	458'4	555'1	934'9	1099'6	3342'8	1'51	4 a.m.
17	439'4	428'9	403'9	697'9	1156'5	3012'6	1'41	5 a.m.
Total in the five years						- - 53265'9		
Mean hourly value						- $\frac{53265'9}{24}$ =	2219'4 = 1'00	

When we examine the values presented in this table, we at once perceive that the occurrence of the larger disturbances of the Vertical Force at Toronto is governed by periodical laws depending on the hours of solar time. The aggregate value of the disturbances in the five years is a maximum at 3 p.m. and a minimum at 11 a.m.; there is also a secondary maximum at 5 p.m. and a secondary minimum at 9 p.m. There is, therefore, a double progression, and between the successive maxima and minima the progression is everywhere continuous. During the hours of the day, *i.e.* from 8 a.m. to 11 p.m., the ratios are less than unity, except from 4 to 7 p.m. inclusive, when the secondary maximum takes place. From midnight to 7 a.m. the ratios at every hour exceed unity.

Tables XXII. and XXIII. exhibit the aggregate values at the different hours, separated into disturbances increasing the force and disturbances decreasing the force, and the ratios of the values at each hour of both kinds of disturbance to their respective mean hourly values.

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TABLE XXIII.

Disturbances increasing the Force.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	63'3	14'8	48'7	17'9	113'1	237'8	0'28	6 a.m.
19	74'9	4'7	47'4	21'0	148'2	296'2	0'32	7 a.m.
20	72'2	27'5	78'8	31'3	177'9	387'7	0'42	8 a.m.
21	62'6	8'9	29'5	22'6	139'9	263'5	0'29	9 a.m.
22	65'8	14'3	80'4	34'5	178'1	373'1	0'40	10 a.m.
23	67'6	29'9	52'3	77'1	262'2	489'1	0'52	11 a.m.
0	86'6	39'8	127'8	149'9	396'7	800'8	0'86	Noon.
1	162'0	80'2	141'3	265'5	495'7	1144'7	1'23	1 p.m.
2	163'6	144'6	194'5	303'6	684'9	1491'2	1'61	2 p.m.
3	203'6	151'9	275'9	469'7	691'4	1792'5	1'93	3 p.m.
4	249'5	185'7	387'6	451'8	870'6	2145'2	2'31	4 p.m.
5	290'1	260'4	350'9	450'2	841'1	2192'7	2'36	5 p.m.
6	278'0	215'7	324'8	518'6	733'5	2070'6	2'23	6 p.m.
7	333'7	221'9	251'3	471'2	857'2	2135'3	2'30	7 p.m.
8	236'4	208'4	200'2	370'2	766'2	1781'4	1'92	8 p.m.
9	146'3	122'7	238'5	223'7	521'1	1250'3	1'35	9 p.m.
10	127'3	87'5	107'7	131'5	397'1	851'1	0'92	10 p.m.
11	110'9	72'8	68'1	80'8	219'2	551'8	0'59	11 p.m.
12	87'3	55'3	74'5	42'0	216'7	475'8	0'51	Midnight.
13	61'5	31'6	45'8	45'0	139'3	326'2	0'35	1 a.m.
14	60'7	24'6	62'1	47'3	130'1	324'8	0'35	2 a.m.
15	60'3	22'7	63'7	42'1	111'1	303'9	0'33	3 a.m.
16	34'5	21'6	50'4	58'2	91'4	256'1	0'28	4 a.m.
17	72'5	13'7	51'9	47'2	115'6	300'9	0'32	5 a.m.
Total in the five years						-	22262'7	
Mean hourly value						- $\frac{22263}{24}$	=	927'6 = 1'00

TABLE XXIV.

Disturbances decreasing the Force.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	335'0	348'7	258'1	615'1	881'8	2439'7	1'90	6 a.m.
19	290'8	237'2	197'9	542'7	1001'6	2270'2	1'76	7 a.m.
20	201'5	161'1	183'7	424'1	420'5	1390'9	1'07	8 a.m.
21	145'2	100'4	100'2	238'8	343'5	928'1	0'72	9 a.m.
22	117'8	43'0	31'3	97'0	151'3	440'4	0'34	10 a.m.
23	45'2	35'4	49'7	42'9	93'6	266'8	0'20	11 a.m.
0	58'5	18'4	60'3	41'4	57'9	236'5	0'18	Noon.
1	51'1	26'4	78'1	40'	59'4	255'4	0'19	1 p.m.
2	57'5	14'4	66'1	39'3	35'9	213'2	0'16	2 p.m.
3	34'3	8'7	41'3	42'4	24'9	151'6	0'11	3 p.m.
4	40'9	15'0	51'4	59'1	13'8	180'2	0'14	4 p.m.
5	52'3	—	46'6	72'0	23'5	194'4	0'15	5 p.m.
6	51'0	13'1	44'3	37'9	23'7	170'0	0'13	6 p.m.
7	55'9	22'7	50'7	46'3	28'1	203'7	0'15	7 p.m.
8	38'3	14'8	56'4	63'6	23'0	196'1	0'15	8 p.m.
9	57'9	74'0	55'0	137'9	81'3	406'1	0'31	9 p.m.
10	118'1	93'5	176'2	514'4	142'5	1044'7	0'80	10 p.m.
11	166'8	155'1	246'8	504'2	441'0	1513'9	1'17	11 p.m.
12	313'7	428'8	393'0	742'0	740'9	2618'4	2'02	Midnight.
13	302'0	437'9	440'4	987'1	1022'6	3190'0	2'47	1 a.m.
14	312'6	495'8	475'4	914'2	1041'3	3239'3	2'50	2 a.m.
15	360'7	543'5	523'4	952'6	1162'0	3542'2	2'74	3 a.m.
16	260'3	436'8	501'7	876'7	1008'2	3086'7	2'39	4 a.m.
17	366'9	415'2	352'0	650'7	1040'9	2825'7	2'19	5 a.m.
Total in the five years						-	31003'2	
Mean hourly value						-	$\frac{31003'2}{24}$	= 1291'8 = 1'00

When we examine the ratios presented in these tables, it is at once seen that both the disturbances which increase the force and those which decrease it are regulated by periodical laws. In the disturbances increasing the force, the values are highest from noon to 10 P.M. inclusive; they exceed the mean hourly value from 1 to 9 P.M., and exceed twice that value from 4 to 7 P.M. The hours of maximum and minimum are approximately, the maximum about 5 P.M., and the minimum about 5 A.M., though (in the latter case particularly) the precise hour is not very distinctly marked. In the disturbances decreasing the force, the values are least from 10 A.M. to 9 P.M. inclusive; they are less than the mean hourly value from 9 A.M. to 10 P.M. inclusive, and greater from 11 P.M. to 8 A.M. inclusive: from midnight to 5 A.M. the values exceed at each hour twice the mean hourly value. The maximum is well marked at 3 A.M.; the minimum less distinctly marked takes place during the hours of the afternoon. When the ratios are highest in the disturbances increasing the force they are *generally* lowest in those decreasing the force, and *vice versa*; but the periodical laws in the two cases are not strictly the converse of each other.

The account given in pp. viii to x of the operations by which the successive steps were accomplished in the investigation of which the disturbances of the Horizontal Force were the subject, applies equally to the present investigation into the periodical laws of the disturbances of the Vertical Force; and in Table XXV. will be found the successive normal values which have been employed of the Vertical Force at the standard temperature of 55° at the different hours, corresponding to Table X in the case of the Horizontal Force.

TABLE A.V.

Hourly Means of the Readings of the Vertical Force Magnetometer, reduced to an uniform Temperature or exceeded 4.0 Scale Divisions or .00026 parts

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.											
	0	1	2	3	4	5	6	7	8	9	10	11
	TORONTO HOURS.											
	18	19	20	21	22	23	0	1	2	3	4	5
1842 :	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
Oct. 1 to 31 -	67.6	68.1	67.5	66.7	66.7	66.8	67.7	68.2	69.0	69.8	69.9	70.0
Nov. 1 to 18 -	64.6	64.9	65.1	64.5	63.9	64.0	64.4	65.6	66.6	66.0	66.5	66.9
Nov. 19 to 30 -	57.3	57.0	57.7	58.0	58.1	58.4	58.9	59.5	59.6	59.9	60.5	61.1
Dec. 1 to 31 -	57.6	57.4	57.7	57.1	56.3	56.5	57.0	57.4	58.6	58.5	58.5	58.6
1843 :												
Jan. 1 to 31 -	57.9	57.5	56.9	57.0	56.6	56.5	57.5	58.0	58.0	58.1	58.1	58.3
Feb. 1 to 8 -	53.1	53.3	54.0	51.7	51.3	51.9	52.4	53.1	53.9	54.3	54.6	54.6
July 2 to 29 -	58.8	58.9	58.9	58.8	58.8	58.7	59.2	59.9	60.8	61.8	62.7	63.6
July and August	57.3	56.8	56.7	56.7	56.7	57.0	57.5	58.2	59.1	60.0	60.7	61.0
Aug. 1 to 31 -	55.8	54.8	54.6	54.7	54.7	55.4	55.8	56.6	57.5	58.2	58.8	58.5
Sept. 1 to 9 -	51.2	50.7	50.7	50.7	50.8	51.0	51.5	52.3	53.0	53.7	54.0	53.8
Sept. 10 to 30 -	46.7	46.6	46.9	46.8	46.9	46.7	47.3	48.1	48.4	49.3	49.2	49.2
1844 :												
Feb. 9 to 29 -	105.4	105.6	106.2	104.9	104.0	104.3	104.8	105.0	105.7	105.7	105.6	105.5
March 1 to 23 -	107.8	107.6	107.8	107.3	106.0	105.2	105.8	106.2	106.9	108.0	108.1	108.5
Mar. 24 to April 6 -	105.0	104.8	105.1	104.8	103.8	103.3	103.7	104.3	105.1	105.6	105.7	106.3
April 7 to 23 -	102.2	102.0	102.5	102.4	101.7	101.3	102.1	102.5	103.4	103.2	103.2	103.9
April 24 to May 11 -	100.1	100.3	100.4	99.9	99.2	98.7	99.4	99.6	100.1	100.9	101.5	102.0
May 12 to 25 -	98.3	98.6	98.3	97.4	96.7	96.3	96.9	96.7	97.8	98.7	99.8	100.1
May 26 to June 8 -	95.5	95.5	95.2	94.6	94.3	94.1	94.6	94.5	95.2	96.1	97.0	97.3
June 9 to 22 -	92.8	92.5	92.2	91.9	91.9	92.0	92.4	92.2	92.9	93.6	94.3	94.5
June 23 to 30 -	90.6	90.0	89.6	89.2	90.0	90.3	90.2	90.7	92.2	91.7	92.6	92.9
July 1 to 6 -	90.8	91.4	91.0	90.0	88.9	88.4	88.6	89.5	90.8	91.8	92.2	93.6
July 7 to 13 -	88.7	89.1	89.0	88.8	87.9	87.9	88.1	88.5	88.9	90.1	91.2	91.1
July 14 to 20 -	86.5	86.5	86.6	86.4	85.7	84.5	84.4	85.0	85.6	87.0	88.9	88.8
July 21 to 31 -	84.4	84.1	83.4	83.0	82.8	82.9	83.2	83.0	83.6	85.1	85.4	86.5
Aug. 1 to 31 -	82.0	82.4	82.4	81.8	81.8	82.0	81.5	82.8	84.3	85.1	85.2	85.1
Sept. 1 to 30 -	80.6	80.6	79.6	79.1	79.4	80.0	80.6	81.9	82.3	82.8	82.3	82.0
Oct. 1 to 31 -	81.0	81.2	80.9	80.4	79.9	79.9	80.7	81.7	82.0	82.7	82.6	82.4
Nov. 1 to 30 -	79.9	80.6	81.0	79.6	79.8	80.4	80.6	81.4	81.9	82.4	82.8	82.7
Dec. 1 to 31 -	78.1	77.8	77.8	77.8	77.6	77.5	78.5	79.3	79.7	80.0	80.2	80.0
1845 :												
Jan. 1 to 15 -	78.2	77.8	78.2	77.8	77.8	78.2	78.2	77.6	78.5	78.9	78.5	78.6
Jan. 16 to 31 -	75.1	75.1	74.7	74.6	74.4	74.5	75.1	75.9	77.4	77.9	77.5	77.5
Feb. 1 to 28 -	70.9	70.7	71.0	70.8	70.5	70.0	70.8	71.6	72.8	73.1	72.9	73.5
March 1 to 31 -	70.4	70.6	70.4	69.5	68.6	68.0	68.6	69.2	70.1	70.9	71.1	71.5
April 1 to 30 -	69.9	69.8	68.9	68.7	68.2	68.1	68.5	69.2	70.1	70.8	70.9	71.2
May 1 to 31 -	67.8	67.3	66.2	65.5	64.5	64.2	65.0	66.2	67.3	68.2	68.6	69.0
June 1 to 21 -	108.7	109.0	108.5	107.5	106.8	107.1	107.0	107.0	108.2	109.4	110.3	110.5
June 22 to 30 -	105.5	105.8	104.2	102.7	101.9	102.2	103.1	103.4	104.9	106.2	107.5	107.2
July 1 to 12 -	103.3	102.9	102.3	102.1	101.5	101.7	101.5	102.0	102.5	104.1	106.0	105.7
July 13 to 31 -	98.8	98.3	97.8	97.5	96.6	95.9	95.5	96.7	97.4	98.1	98.7	99.3
Aug. 1 to 16 -	167.2	166.8	166.6	165.8	165.4	165.6	165.4	166.0	167.5	167.8	167.9	168.3
Aug. 17 to 31 -	163.8	162.7	162.7	161.8	161.4	162.2	162.6	163.7	164.7	164.6	165.0	165.6

of 55° Fahr
of the whole

VERTICAL FORCE: TABLE OF NORMALS.

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TABLE XXV.

rm Temperature
s or .00026 parts

of 55° Fahrenheit, and omitting disturbed Observations in which the Amount of Disturbance equalled
of the whole Vertical Force at Toronto.

GOTTINGEN HOURS.														Periods from which the Hourly Means are derived.
10	11	12	13	14	15	16	17	18	19	20	21	22	23	
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
69°9	70°0	69°9	69°6	69°6	69°6	68°6	67°9	67°5	67°7	68°1	67°9	67°5	67°5	1842 :
66°5	66°9	66°6	66°9	66°7	66°3	66°4	64°8	64°7	64°6	64°6	64°4	64°9	64°9	Oct. 1 to 31.
60°5	61°1	61°7	61°1	60°8	60°5	61°0	59°7	58°9	60°6	59°3	59°1	58°9	58°9	Nov. 1 to 18.
58°5	58°6	58°1	58°1	58°0	58°3	57°9	57°7	57°5	57°3	56°2	57°2	56°8	57°5	Nov. 19 to 30.
														Dec. 1 to 31.
58°1	58°3	58°9	59°1	58°8	59°0	58°9	58°6	57°5	57°5	57°5	57°2	57°1	57°3	1843 :
54°6	54°6	55°0	55°0	54°8	54°8	54°4	53°9	53°2	52°8	53°0	53°0	53°2	53°6	Jan. 1 to 31.
62°7	63°6	63°6	62°4	61°6	61°3	60°5	59°7	59°4	59°2	57°9	58°0	58°4	58°4	Feb. 1 to 28.
60°7	61°0	60°9	60°1	59°6	59°2	58°4	57°7	57°4	57°1	56°2	56°1	56°2	56°8	July 2 to 29.
58°8	58°5	58°2	57°8	57°6	57°1	56°4	55°7	55°4	55°1	54°4	54°2	54°1	55°2	July and August.
54°0	53°8	53°7	53°5	53°3	52°8	52°1	51°7	51°1	50°7	49°9	50°3	50°0	50°8	Aug. 1 to 31.
49°2	49°2	49°2	49°2	49°1	48°5	47°9	47°7	46°9	46°3	45°4	46°5	46°0	46°5	Sept. 1 to 30.
														Sept. 10 to 30.
105°6	105°5	105°6	106°0	106°2	105°7	105°7	105°8	106°0	105°6	105°3	105°3	105°6	105°6	1844 :
108°1	108°5	108°3	108°0	107°8	108°0	107°7	107°0	107°0	106°5	106°8	106°5	107°1	106°9	Feb. 9 to 29.
105°7	106°3	106°0	105°9	105°4	105°1	104°4	104°2	104°5	104°5	104°5	104°2	104°2	104°4	March 1 to 23.
103°2	103°9	103°5	102°8	102°7	102°0	101°1	101°3	102°1	102°3	102°2	101°9	101°4	102°0	March and April.
101°5	102°6	101°6	101°4	101°1	100°7	99°8	99°6	99°8	99°8	99°5	99°7	99°4	100°0	April 7 to 23.
99°8	100°1	99°8	100°1	99°6	99°5	98°6	98°0	97°7	97°2	96°7	97°5	97°5	98°1	April and May.
97°0	97°3	97°0	97°1	96°7	96°7	96°0	95°5	95°2	94°7	94°5	94°8	95°0	95°5	May 12 to 25.
91°3	94°5	94°1	94°1	93°9	93°9	93°3	93°0	92°8	92°2	92°2	92°1	92°4	93°0	May and June.
92°6	92°9	91°9	91°5	91°6	91°5	91°0	90°8	91°3	90°6	90°3	89°9	89°8	90°6	June 9 to 22.
92°2	93°6	92°6	92°1	91°7	91°7	91°1	91°0	90°7	90°2	90°0	90°1	90°6	91°2	June 23 to 30.
91°2	91°1	91°3	90°8	90°6	90°4	89°9	89°5	89°6	89°1	89°0	89°6	89°0	88°0	July 1 to 6.
88°9	88°8	88°4	87°7	87°8	87°0	86°6	86°4	84°9	86°3	86°6	86°7	86°3	86°4	July 7 to 13.
85°4	86°5	86°4	86°0	84°8	84°4	84°0	84°0	83°7	83°3	84°2	84°4	84°3	84°4	July 14 to 20.
85°2	85°1	85°1	84°3	83°9	83°4	82°8	82°2	82°1	81°5	80°7	81°1	82°2	82°4	July 21 to 31.
82°3	82°0	81°7	81°4	81°6	81°7	81°6	80°7	80°1	80°9	80°7	80°1	80°0	80°2	Aug. 1 to 31.
82°6	82°4	82°3	82°8	82°3	81°8	81°4	81°1	81°2	80°3	80°7	81°2	80°8	80°4	Sept. 1 to 30.
82°8	82°7	82°2	82°3	82°3	82°2	82°5	81°4	81°1	80°7	80°2	80°1	80°1	80°3	Oct. 1 to 31.
80°2	80°0	80°0	79°8	79°7	79°8	79°6	79°0	78°9	78°7	78°7	78°6	78°2	78°3	Nov. 1 to 30.
														Dec. 1 to 31.
78°5	78°6	78°7	78°4	78°4	78°6	78°4	77°9	78°1	77°8	77°7	77°4	78°8	76°8	1845 :
77°5	77°5	77°5	77°7	77°4	76°7	75°6	75°9	75°7	75°6	75°1	75°1	75°1	75°1	Jan. 1 to 15.
72°9	73°3	73°1	72°9	72°8	72°6	72°4	72°5	71°3	71°6	71°4	71°6	71°0	71°3	Jan. 16 to 31.
71°1	71°5	71°6	71°5	71°4	71°3	71°0	71°2	70°5	70°3	69°9	70°5	70°7	70°5	Feb. 1 to 28.
70°9	71°2	71°1	70°8	71°0	70°7	70°0	70°0	69°5	69°2	68°8	69°1	69°3	70°0	March 1 to 31.
68°6	69°0	68°8	68°3	67°8	67°2	67°4	66°7	66°5	66°6	66°8	66°8	66°7	67°2	April 1 to 30.
110°3	110°5	110°5	109°8	109°7	109°2	109°5	109°2	108°6	108°9	109°0	109°5	109°4	109°8	May 1 to 31.
107°5	107°2	106°9	106°9	106°1	106°4	105°8	105°6	105°9	105°5	105°1	105°1	105°6	106°4	June 11 to 21.
106°0	105°7	106°3	105°7	105°2	105°1	104°2	103°9	103°5	103°6	103°7	104°1	103°7	103°9	June 22 to 30.
98°7	99°3	99°2	98°4	97°6	97°5	97°7	97°3	97°0	96°4	95°7	96°3	96°6	98°0	July 1 to 12.
167°9	168°3	168°4	167°4	167°3	166°3	166°5	165°3	165°3	164°4	165°4	165°9	165°4	165°9	July 13 to 31.
165°0	165°6	161°9	164°2	164°4	163°5	163°3	163°1	162°7	162°5	162°1	162°3	162°6	163°3	Aug. 1 to 16.
														Aug. 17 to 31.

(Continued on p. xi)

(Continued on p. xl.)

ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE XXV.—continued.

Periods to which the Hourly Means correspond.	GÜTTINGEN HOURS.											
	0	1	2	3	4	5	6	7	8	9	10	11
	TORONTO HOURS.											
	18	19	20	21	22	23	0	1	2	3	4	5
1845 (cont.):	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
Sept. 1 to 13 -	161°0	160°8	161°2	160°2	160°9	161°4	162°2	163°5	165°4	165°4	165°1	164°9
Sept. 14 to 30 -	164°1	163°5	163°0	162°1	162°0	162°6	163°1	164°2	165°1	164°9	165°3	165°2
Oct. 1 to 18 -	162°9	163°0	163°0	161°6	161°5	161°7	162°1	162°6	163°4	164°0	163°9	164°2
Oct. 19 to 31 -	158°8	159°1	159°5	159°9	158°9	158°3	158°3	159°5	160°6	160°8	160°0	160°6
Nov. 1 to 15 -	159°6	159°8	159°2	158°5	158°4	158°6	159°4	160°2	161°4	161°2	160°7	160°4
Nov. 16 to 30 -	158°1	158°1	157°5	157°1	156°6	157°3	158°7	159°0	159°7	159°0	158°8	158°9
Dec. 1 to 31 -	155°5	155°2	155°2	155°4	155°5	155°6	155°7	156°4	157°1	157°6	157°5	157°1
1846:												
Jan. 1 to 31 -	154°9	154°9	155°2	154°4	154°3	154°4	154°7	155°9	156°5	156°7	156°4	156°4
Feb. 1 to 24 -	155°0	155°1	155°1	154°1	153°3	153°4	154°3	154°4	155°1	155°6	155°8	155°8
March 1 to 28 -	154°5	154°5	154°6	153°8	152°7	152°7	152°7	153°6	154°4	155°4	155°4	155°5
April 3 to 25 -	213°7	213°5	213°2	212°2	211°2	211°2	211°2	211°8	213°2	214°0	213°6	213°4
April 26 to May 9 -	212°3	211°9	211°6	210°6	210°0	211°9	211°0	212°0	213°4	213°5	213°5	213°9
May 10 to 23 -	210°9	210°3	210°1	209°1	208°7	210°6	210°9	212°3	213°6	213°0	213°5	214°0
May 24 to June 6 -	209°3	208°6	208°7	208°4	207°9	209°1	208°5	210°4	211°5	212°0	212°7	212°5
June 7 to 24 -	207°8	206°9	207°3	207°8	207°1	207°6	208°0	208°5	209°4	211°0	211°9	210°9
June 25 to July 4 -	206°7	206°0	206°0	206°1	205°7	206°0	206°4	206°6	207°8	209°0	210°3	210°6
July 5 to 25 -	205°6	205°1	204°6	204°3	204°3	204°3	204°7	204°8	206°1	207°1	208°8	209°8
July 26 to Aug. 8 -	204°4	204°4	203°8	203°3	202°8	203°1	203°5	204°1	205°2	206°2	207°6	208°6
Aug. 9 to 22 -	203°3	203°6	202°9	202°4	201°4	201°9	202°4	203°4	204°4	205°3	206°4	207°1
Aug. 23 to 31 -	201°8	201°8	201°4	200°5	200°0	201°1	201°3	202°3	202°8	203°9	204°5	204°8
Sept. 1 to 30 -	200°4	200°0	199°9	198°6	198°6	200°4	200°2	201°2	202°5	202°5	202°7	202°6
Oct. 1 to Nov. 1 -	200°3	200°2	200°3	200°2	199°6	199°7	200°0	201°0	201°9	202°1	202°1	202°0
Nov. 2 to 7 -	198°3	198°4	198°5	198°3	197°9	19°8	198°3	199°1	200°0	200°1	199°8	199°8
Nov. 8 to 28 -	196°3	196°6	196°6	196°4	196°2	196°6	197°2	198°0	198°0	197°5	197°6	197°6
Nov. 29 to Dec. 12 -	193°3	193°6	193°5	193°0	192°6	193°5	194°2	195°0	194°8	195°0	195°3	195°3
Dec. 13 to 16 -	190°4	190°6	190°2	189°9	189°4	189°5	190°3	190°7	191°1	191°0	191°2	191°2
Dec. 17 to 31 -	187°6	187°0	187°7	187°1	186°8	186°8	187°5	187°7	188°0	188°0	187°3	188°2
1847:												
Jan. 1 to 15 -	185°7	186°0	185°5	184°7	184°5	185°3	186°4	186°2	186°5	186°8	186°7	186°8
Jan. 16 to 31 -	183°1	183°1	183°0	182°9	183°2	182°5	183°1	183°2	183°3	183°3	182°7	183°8
Feb. 1 to 28 -	182°0	182°9	183°4	181°8	181°6	181°6	182°2	182°7	183°1	183°0	183°1	183°2
March 1 to 31 -	182°7	183°6	184°2	183°3	182°5	182°2	183°1	183°2	184°0	184°4	184°6	184°8
April 1 to 30 -	183°5	183°3	182°8	182°1	181°3	181°1	181°5	182°1	183°1	184°2	184°7	184°9
May 1 to 31 -	181°0	180°4	179°8	179°1	178°3	178°3	178°2	179°0	179°7	180°8	181°6	182°3
June 1 to 15 -	178°4	176°8	176°5	176°5	176°8	177°1	177°4	177°8	178°2	180°0	179°5	180°0
June 16 to 30 -	175°4	175°2	174°6	174°4	174°1	173°2	173°2	173°6	174°2	175°6	177°0	177°1
July 1 to 31 -	173°3	173°3	173°0	172°5	171°7	171°7	171°6	172°0	172°5	173°9	174°2	174°8
Aug. 1 to 31 -	171°8	171°0	170°3	169°8	170°9	170°9	170°9	171°1	171°5	171°9	172°6	173°1
Sept. 1 to 30 -	172°7	172°8	172°5	171°3	170°7	171°5	171°9	173°0	173°0	173°3	173°6	174°1
Oct. 1 to 31 -	172°9	173°7	173°7	173°2	173°0	172°2	172°8	174°2	174°4	174°7	174°9	174°6
Nov. 1 to 30 -	172°6	173°3	172°3	172°2	171°9	172°6	173°4	174°1	175°4	175°3	175°5	175°2
Dec. 1 to 31 -	171°1	170°8	170°7	170°9	170°6	171°0	171°0	171°9	172°4	173°1	172°2	172°0
1848:												
Jan. 1 to 31 -	167°2	167°6	167°6	166°9	166°8	167°1	168°6	168°9	169°1	169°4	169°8	169°5
Feb. 1 to 29 -	164°8	165°4	166°5	165°0	163°2	163°5	164°7	165°3	165°8	166°3	165°7	166°1
March 1 to 31 -	163°5	164°8	164°2	162°9	162°1	162°2	163°3	164°0	164°3	164°3	165°0	165°0
April 1 to 30 -	161°2	161°0	163°7	162°7	162°1	161°5	162°1	163°2	164°0	164°5	165°4	164°0
May 1 to 31 -	160°0	160°0	160°0	159°6	158°5	157°4	158°1	159°1	160°4	161°0	161°6	161°5
June 1 to 30 -	156°1	155°9	154°9	153°9	151°0	153°6	153°8	153°6	154°9	156°2	156°2	157°7

VERTICAL FORCE: TABLE OF NORMALS.

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TABLE XXV.—continued.

		GÖTTINGEN HOURS.												Periods from which the Hourly Means are derived.
10	11	12	13	14	15	16	17	18	19	20	21	22	23	
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
165°1	164°9	164°9	164°5	163°8	163°4	163°4	162°8	162°1	160°9	160°2	160°9	160°2	161°3	
165°3	165°2	164°9	164°5	163°8	163°4	163°4	162°8	162°1	160°9	160°2	160°9	160°2	161°3	
163°9	164°2	164°5	164°3	164°7	164°5	163°4	162°7	162°9	163°2	163°0	161°7	162°0	162°9	
160°0	160°6	161°0	161°2	161°1	161°0	163°2	163°4	162°9	162°3	162°4	162°4	162°3	162°5	
160°7	160°4	160°6	160°5	161°0	162°3	161°3	161°2	160°6	160°0	159°5	159°7	159°4	159°6	
158°8	158°9	160°6	159°8	159°9	159°9	159°4	159°0	159°0	159°3	158°9	159°2	159°1	159°4	
157°5	157°1	158°8	158°6	157°8	158°9	157°4	158°1	157°5	156°9	156°8	157°6	157°6	157°5	
157°1	157°5	157°3	157°0	157°0	157°2	157°2	156°4	155°8	155°9	155°8	155°3	155°4	155°4	
156°4	156°4	156°1	156°5	156°6	156°2	156°4	156°0	155°7	154°8	155°2	154°6	154°9	154°7	
155°8	155°8	156°1	156°4	155°9	155°8	156°1	155°7	155°4	154°9	154°8	154°7	154°3	154°5	
155°4	155°5	155°5	155°5	154°8	154°7	154°8	155°4	154°6	154°2	154°1	154°1	154°0	153°8	
213°6	213°4	213°6	213°8	213°4	212°3	212°4	211°6	210°9	210°7	210°9	210°7	210°7	210°7	
213°5	213°9	213°1	215°4	214°9	213°5	213°4	213°3	212°0	212°3	212°7	212°6	212°2	213°3	
213°5	214°0	213°6	213°8	213°4	212°3	212°4	211°6	210°9	210°7	210°9	210°7	210°7	210°7	
212°7	212°5	214°2	212°2	211°9	211°1	211°4	209°9	209°8	209°1	209°2	208°8	210°7	210°0	
211°9	210°9	212°1	211°4	210°7	210°2	209°7	209°0	208°5	208°3	208°0	206°9	208°6	208°7	
210°3	210°6	210°6	210°6	209°5	209°2	208°0	208°1	207°3	207°5	206°7	205°0	206°5	207°5	
208°8	208°8	209°9	210°1	208°5	207°9	206°6	206°7	206°0	205°2	203°5	203°6	203°6	205°1	
207°6	208°6	209°2	209°6	207°5	206°6	205°2	205°4	204°8	202°8	200°3	200°2	200°9	202°8	
206°4	207°1	207°7	207°6	206°4	204°7	204°4	203°9	203°8	202°5	201°0	200°8	200°5	202°1	
204°5	204°8	206°3	206°0	205°3	202°8	203°7	202°5	202°8	202°3	201°7	201°5	201°2	201°5	
202°7	202°6	204°2	204°1	203°5	202°0	202°5	201°5	201°5	201°5	201°4	201°1	200°6	200°1	
202°1	202°0	202°2	202°3	201°8	201°2	201°4	200°4	200°2	200°7	201°1	200°7	200°0	199°8	
199°8	199°8	202°0	202°1	201°8	201°0	201°1	200°0	200°0	199°6	200°0	199°9	199°1	199°0	
197°5	197°6	199°9	200°1	199°5	199°6	199°0	198°4	198°2	198°5	198°4	197°9	197°8	197°8	
195°0	195°3	197°7	198°2	198°5	197°9	198°1	197°9	196°7	196°8	197°1	196°9	196°7	196°6	
191°0	191°2	191°9	194°7	194°8	195°3	195°0	194°4	193°8	193°4	192°7	192°3	192°8	193°1	
187°3	188°2	191°1	191°2	191°4	191°5	190°9	190°7	190°0	189°6	190°0	189°8	189°4	189°6	
187°3	188°2	188°7	188°7	188°5	188°4	187°8	187°7	187°6	187°6	187°2	187°7	187°1	187°4	
186°7	186°8	187°0	186°7	186°7	186°2	185°7	185°9	185°5	185°3	185°3	185°7	185°5	185°2	
182°7	183°8	184°2	183°8	184°0	183°5	183°7	183°6	183°7	183°4	183°3	183°3	182°9	182°9	
183°1	183°2	183°3	183°3	183°0	182°8	182°7	182°6	182°6	182°1	182°2	182°2	181°7	181°7	
184°6	184°8	181°2	183°9	184°6	184°5	184°4	183°9	183°5	183°3	182°6	183°4	183°7	183°2	
184°7	184°9	184°3	184°5	184°2	183°6	183°6	183°3	183°3	182°4	182°4	182°9	182°7	183°1	
181°6	182°3	182°3	182°2	182°1	181°8	181°5	180°8	180°4	180°3	180°2	180°1	179°8	180°9	
179°5	180°0	179°6	179°1	179°4	179°3	178°7	178°1	176°8	176°1	177°2	177°2	177°8	178°2	
177°0	177°1	177°3	176°8	176°1	175°5	174°7	174°5	173°8	174°4	174°2	174°4	175°8	175°4	
174°2	174°8	174°7	174°2	173°3	173°6	172°7	172°5	172°6	171°7	171°6	171°5	172°1	172°6	
172°6	173°1	172°4	172°0	172°0	171°2	171°1	171°1	169°6	170°5	170°0	170°3	169°7	170°2	
173°6	174°1	174°0	172°2	172°5	172°6	172°4	172°0	170°8	170°5	171°0	171°6	170°6	171°6	
171°9	174°6	175°1	175°3	175°2	175°0	175°1	174°7	173°6	173°1	173°1	173°5	173°1	172°9	
175°5	175°2	174°8	175°2	175°4	174°9	174°3	174°4	173°9	172°9	172°7	172°6	172°6	172°4	
172°2	172°0	171°8	172°4	172°5	172°5	172°4	171°8	170°4	171°2	170°8	171°1	170°6	170°0	
169°8	169°5	169°6	169°7	169°6	169°3	168°7	168°7	168°1	168°0	167°2	167°3	167°2	167°3	
165°7	166°1	165°6	165°6	165°8	166°2	166°1	166°0	165°8	165°1	165°2	165°0	165°1	165°1	
165°0	165°0	165°4	165°7	165°5	165°2	165°1	165°1	164°4	163°7	163°6	163°7	164°1	163°8	
165°4	164°0	164°3	164°9	163°9	163°7	163°6	162°5	161°7	162°0	162°3	162°6	162°4	163°3	
161°6	161°5	162°1	161°0	160°5	160°3	160°3	159°7	158°6	158°4	159°2	159°9	159°8	160°1	
156°2	157°7	156°9	158°1	157°2	156°4	156°0	155°6	154°9	154°8	154°9	155°1	156°5	156°6	
1845:														
Sept. 1 to 13.														
Sept. 14 to 30.														
Oct. 1 to 18.														
Oct. 19 to 31.														
Nov. 1 to 15.														
Nov. 16 to 30.														
Dec. 1 to 31.														
1846:														
Jan. 1 to 31.														
Feb. 1 to 28.														
March 1 to 31.														
April 1 to 30.														
April 1 to May 31.														
May 1 to 31.														
May 1 to June 31.														
June 1 to 30.														
June 1 to July 31.														
July 1 to 31.														
July 10 to Aug. 31.														
Aug. 1 to 31.														
Aug. 1 to Sept. 30.														
Sept. 1 to 30.														
Oct. 1 to 31.														
Oct. 1 to Nov. 30.														
Nov. 1 to 30.														
Nov. 29 to Dec. 12.														
Dec. 1 to 31.														
Dec. 17 to 31.														
1847:														
Jan. 1 to 15.														
Jan. 16 to 31.														
Feb. 1 to 28.														
March 1 to 31.														
April 1 to 30.														
May 1 to 31.														
June 1 to 15.														
June 16 to 30.														
July 1 to 31.														
Aug. 1 to 31.														
Sept. 1 to 30.														
Oct. 1 to 31.														
Nov. 1 to 30.														
Dec. 1 to 31.														
1848:														
Jan. 1 to 31.														
Feb. 1 to 29.														
March 1 to 31.														
April 1 to 30.														
May 1 to 31.														
June 1 to 30.														

INCLINATION AND TOTAL FORCE.

Analysis of the larger Disturbances.—The disturbances of the Inclination which equalled or exceeded $1''.0$, and of the total force which equalled or exceeded $.0004$ of the whole force, both measured from the respective normals at the same hour and in the same month, were obtained from the observed disturbances of the Horizontal and Vertical Forces in the following manner: Tables were formed, in the first column of which were placed in chronological order the larger disturbances of the Vertical Force, separated as already described, and in the second column those of the Horizontal Force, each expressed in terms of the respective forces, by the conversion of the scale divisions in which the disturbances were observed into parts of the respective forces by means of the scale coefficient.

At a large proportion of the hours of contemporaneous observation, when one of the two components of the force exhibited a disturbance which by its amount was brought into the category of the larger disturbances, the other component was also disturbed. In such cases there were contemporaneous entries in both columns; but when one of the components only was so affected, the entry in the corresponding column of the other component was blank. These blanks were all filled up by inserting for the component which did not exhibit a disturbance of sufficiently large amount to have been classed as a large disturbance and separated accordingly, the difference, whatever that might be, between the observation at that hour and its proper normal. These two columns then exhibited all the larger disturbances of both the horizontal and vertical components whenever either component was disturbed, with the contemporaneous difference of the other component from its mean or normal value in the cases when one only of the two components exhibited a large disturbance. The entries in the two columns had each their proper signs prefixed, + if the disturbance or difference from the normal were in augmentation of the force, and - if in diminution of the force. These two columns then expressed the values of $\frac{\Delta Y}{Y}$ for the Vertical Force, and $\frac{\Delta X}{X}$ for the Horizontal Force, for every hour at

which either $\frac{\Delta Y}{Y}$ equalled or exceeded $.00026$ parts of the Vertical Force, or $\frac{\Delta X}{X}$ equalled or exceeded $.0012$ parts of the Horizontal Force. A third and fourth column were then filled in, the third expressing the values of $\Delta\theta$, or the disturbances of the Inclination, and the fourth the values of $\frac{\Delta\phi}{\phi}$, or the disturbances of the Total Force (in parts of ϕ , the total force at Toronto), corresponding to the entries in the first and second columns, and computed by the formulæ—

$$\Delta\theta = \sin \theta \cos \theta \left(\frac{\Delta Y}{Y} - \frac{\Delta X}{X} \right);$$

$$\frac{\Delta\phi}{\phi} = \cos^2 \theta \frac{\Delta X}{X} + \sin^2 \theta \frac{\Delta Y}{Y}$$

INCLINATION : DISTURBANCES.

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From the third and fourth columns all the disturbances of the Inclination ($\Delta\theta$) which equalled or exceeded 1'0 in amount, and all the disturbances of the total force ($\frac{\Delta\phi}{\phi}$) equalling or exceeding '0004 in amount, were taken, as forming respectively a sufficient body of the larger disturbances of each element to permit their periodical laws to be investigated and shown. These disturbances were then dealt with, in regard to classification and tabular arrangement, in the same manner that has been already explained in treating of the disturbances of the horizontal and vertical components of the force.

In deriving the disturbances of the Inclination and Total Force from those of the Horizontal and Vertical Forces, all the calculations and arrangement in tables have been prepared, under the superintendence of Mr. Magrath, by the Non-Commissioned Officers of the Royal Artillery employed in the Woolwich Office; every part of the process having had the advantage of two independent computers.

Inclination.—The aggregate values of the disturbed observations of the Inclination in the different years, each ending June 30th, are as follows :—

TABLE XXVI.

Year ending June 30th 1844*	-	-	-	-	684'3
" " 1845	-	-	-	-	613'9
" " 1846	-	-	-	-	753'7
" " 1847	-	-	-	-	1399'0
" " 1848	-	-	-	-	3139'8
Total in the five years	-	-	-	-	6590'7

$$\text{Mean annual value } \frac{6590'7}{5} = 1318'1.$$

The ratios in each year to the mean annual value are as follows :—

TABLE XXVII.

Year ending June 30th 1844	-	-	-	-	0'52
" " 1845	-	-	-	-	0'47
" " 1846	-	-	-	-	0'57
" " 1847	-	-	-	-	1'06
" " 1848	-	-	-	-	2'40

Table XXVIII. exhibits the aggregate values in the different years divided into disturbances increasing the Inclination and disturbances decreasing the Inclination.

* Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (see page xi).

ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE XXVIII.

			Increasing.	Decreasing.
Year ending June 30th 1844	-	-	498'8	155'5
" " 1845	-	-	510'5	103'4
" " 1846	-	-	612'7	141'0
" " 1847	-	-	1165'8	233'2
" " 1848	-	-	2809'8	330'1
Total in the five years	-	-	5597'5	993'2

The effect of the larger disturbances is, therefore, to increase the Inclination considerably more than to decrease it. The ratios of the values of the disturbances increasing the Inclination to those which decrease it, on the average of the five years is 5.6 to 1. In the several years the ratios are as follows:—

TABLE XXIX.

Year ending June 30th 1844	As 2'7 to 1.
" " 1845	As 5'0 to 1.
" " 1846	As 4'3 to 1.
" " 1847	As 5'0 to 1.
" " 1848	As 8'5 to 1.

The augmentation of the ratio in the year ending June 30th, 1848, was occasioned by the excessive amount of disturbance in December 1847, which in the case of the Inclination was chiefly in disturbances increasing its value.

Table XXX. exhibits the aggregate values of the disturbances, distributed into the different *months* of their occurrence, and the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXX.

Months.	In the Year ending June 30th,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	69'7	16'1	38'4	95'2	89'5	308'9	0'56	July.
August	53'5	62'5	45'4	100'5	143'4	405'3	0'74	August.
September	30'0	73'8	83'0	200'5	531'3	918'6	1'67	September.
October	59'5	73'4	50'4	182'6	429'7	795'6	1'45	October.
November	138'7	86'7	25'2	54'4	253'4	558'4	1'02	November.
December	53'6	61'4	73'9	32'6	527'8	749'3	1'37	December.
January	33'8	72'5	41'4	46'1	161'3	355'1	0'64	January.
February	24'9	38'3	32'1	78'2	340'8	514'3	0'94	February.
March	98'1	35'5	63'9	149'4	184'6	531'5	0'97	March.
April	83'8	49'8	114'2	236'6	288'2	772'6	1'41	April.
May	30'5	33'1	99'9	162'1	140'9	466'5	0'85	May.
June	8'2	10'8	85'9	60'8	48'9	214'6	0'39	June.
Total in the five years					-	6590'7		
Mean monthly values					-	$\frac{6590'7}{12}$	=	549'2 = 1'00

December is the only exception to a periodical variation, having its maxima at the epochs of the equinoxes, and its minima at those of the solstices. This apparent anomaly was occasioned by the excessive and unusual disturbances in December 1847. The ratio for the month of December taken from a comparison of the disturbances in that month in the first four years, with the mean monthly value in the same years, is 0.77.

Table XXXI. exhibits the aggregate values of the disturbances of the Inclination distributed into the different *hours* of their occurrence, together with the ratios of the values at each hour to the mean hourly value or average of all the hours.

TABLE XXXI.

Toronto Astronomical Time.	In the Year ending June 30th,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
Hours.								
18	19.4	12.4	13.0	40.1	139.0	223.9	0.81	6 a.m.
19	16.5	16.6	17.7	47.0	224.8	322.6	1.17	7 a.m.
20	10.0	15.0	17.2	38.9	211.2	292.3	1.07	8 a.m.
21	20.6	20.1	55.9	51.6	160.4	288.6	1.00	9 a.m.
22	36.8	34.1	31.4	60.4	122.1	284.8	1.00	10 a.m.
23	36.5	29.7	31.9	51.0	130.5	259.6	1.00	11 a.m.
0	38.8	35.5	31.8	55.3	125.0	289.4	1.00	Noon.
1	34.4	25.2	41.8	42.8	126.8	271.0	0.99	1 p.m.
2	33.5	23.1	23.7	48.8	134.5	230.6	0.84	2 p.m.
3	21.9	26.4	32.9	48.1	95.6	225.2	0.82	3 p.m.
4	35.7	18.8	30.0	40.0	77.5	202.0	0.73	4 p.m.
5	40.5	32.2	30.5	56.7	77.7	237.6	0.86	5 p.m.
6	43.2	28.0	41.9	61.0	93.8	270.9	0.99	6 p.m.
7	45.1	40.6	33.9	66.8	121.4	307.8	1.12	7 p.m.
8	37.0	40.1	41.5	66.2	94.8	282.6	1.03	8 p.m.
9	42.4	34.6	50.9	88.8	82.1	298.8	1.09	9 p.m.
10	36.5	35.4	48.9	83.0	113.9	317.7	1.16	10 p.m.
11	31.9	21.6	45.1	74.0	111.3	313.9	1.11	11 p.m.
12	19.7	33.3	42.2	52.6	146.3	291.1	1.07	Midnight.
13	20.9	28.4	27.9	100.0	160.7	337.9	1.23	1 a.m.
14	22.1	15.0	22.4	70.4	189.5	323.4	1.18	2 a.m.
15	13.8	15.7	20.8	79.2	133.4	262.9	0.96	3 a.m.
16	9.1	14.3	19.2	41.5	146.4	230.5	0.84	4 a.m.
17	18.0	13.8	12.2	34.5	124.1	202.6	0.74	5 a.m.
Total in the five years						6590.7		
Mean hourly value						$\frac{6590.7}{24} =$	274.6 = 1.00	

The hourly disturbances of the Inclination arrange themselves in four groups, exhibiting a double progression. From 7 a.m. to noon, and again from 7 p.m. to 2 a.m. inclusive, the values equal or exceed the mean hourly value; and from 1 p.m.

to 6 P.M. inclusive, and again from 3 A.M. to 6 A.M. inclusive, they fall short of the mean hourly value.

Table XXXII. shows, in columns 2 and 3, the values at the different hours separated into disturbances which increase the Inclination and disturbances which decrease it.

The disturbances which increase the Inclination have two epochs of maxima, and two of minima; the principal maximum is at 1 A.M., and the secondary maximum at 7 A.M.; the principal minimum at 4 P.M., and the secondary at 5 A.M. The progression from the afternoon minimum to the maximum twelve hours later, may be regarded as continuous, with slight and possibly accidental interruptions at 8 P.M. and midnight; from the maximum at 1 A.M. to the minimum at 5 A.M., and thence to the secondary maximum at 7 A.M., the progressions are continuous and uninterrupted; and from the maximum at 7 A.M. to the afternoon minimum it is also continuous, with slight and possibly accidental interruptions at noon and 3 P.M.

The disturbances which decrease the Inclination are comparatively small at all the hours: they exhibit, however, a systematic tendency to be greater during the hours of the day than during those of the night; their actual maximum is at 2 P.M., and their minimum at 2 A.M.

The disturbances which increase the Inclination preponderate greatly at all the hours. In the Declination, there are certain hours in which the easterly deflections preponderate, and others in which the westerly deflections preponderate; and in the total force there are certain hours in which the general effect of the disturbances is to increase the force, and other hours in which their general effect is to decrease it. The Inclination differs in this respect from either of the other two magnetic elements; inasmuch as its disturbances have a uniform character in increasing the Inclination at all the hours. The greater or less degree in which this effect is produced is shown in column 4, which contains the *differences* between the two preceding columns (or their sums when the signs prefixed are regarded). This column therefore exhibits at the different hours the accumulated *effect* in five years of the disturbances of 1'0, and upwards. The least amount of disturbance occurs at 2, 3, and 4 in the afternoon; at 6 P.M. it becomes considerable, and continues so till 3 A.M. inclusive, showing a decided maximum at 1 and 2 A.M. There is a second increase in the amount of disturbance at 7, 8, and 9 A.M., with a secondary maximum at 7 A.M., not much inferior in amount to the principal maximum at 2 A.M. In column 5 is shown the average *daily* effect of the disturbances of 1'0 and upwards, at the different hours of the 24; this is obtained by dividing the accumulated effect at the different hours in five years by 1550, being the number of days in the five years on which the observations were made.

INCLINATION : DISTURBANCES.

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TABLE XXXII.

Toronto Astronomical Time.	Aggregate Values of the Disturbances		Excess of the Increasing Disturbances in Five Years.	Mean Diurnal Effect of the larger Disturbances.	Toronto Civil Time.
	Increasing the Inclination.	Decreasing the Inclination.			
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
H.					
18	+189'7	-34'2	+155'5	+0'10	6 a.m.
19	+301'7	-20'9	+280'8	+0'18	7 a.m.
20	+266'8	-25'5	+241'3	+0'16	8 a.m.
21	+245'1	-42'5	+201'6	+0'13	9 a.m.
22	+224'4	-60'4	+164'0	+0'10	10 a.m.
23	+205'8	-73'8	+132'0	+0'09	11 a.m.
0	+216'6	-72'8	+143'8	+0'09	Noon.
1	+201'4	-69'6	+131'8	+0'09	1 p.m.
2	+150'8	-79'8	+71'0	+0'05	2 p.m.
3	+168'2	-57'0	+111'2	+0'07	3 p.m.
4	+142'2	-59'8	+82'4	+0'05	4 p.m.
5	+183'1	-54'5	+128'4	+0'08	5 p.m.
6	+241'3	-29'6	+211'7	+0'14	6 p.m.
7	+265'8	-42'0	+223'8	+0'14	7 p.m.
8	+260'2	-22'4	+237'8	+0'16	8 p.m.
9	+275'1	-23'7	+251'4	+0'16	9 p.m.
10	+275'2	-42'5	+232'7	+0'15	10 p.m.
11	+279'3	-34'6	+244'7	+0'16	11 p.m.
12	+256'6	-37'5	+219'1	+0'14	Midnight.
13	+309'4	-28'5	+280'9	+0'18	1 a.m.
14	+308'2	-15'2	+293'0	+0'19	2 a.m.
15	+243'3	-19'6	+223'7	+0'14	3 a.m.
16	+209'4	-21'1	+188'3	+0'12	4 a.m.
17	+177'9	-24'7	+153'2	+0'10	5 a.m.

Total Force.—The aggregate values of the disturbed observations of the Total Force in the different years, each ending June 30th, are as follows:—

TABLE XXXIII.

Year ending June 30th 1844*	-	-	'4491 parts of the total force.
" " 1845	-	-	'2775 " "
" " 1846	-	-	'3809 " "
" " 1847	-	-	'7293 " "
" " 1848	-	-	1'0747 " "
Total in the five years	-	-	2'9115
Mean annual value	-	$\frac{2'9115}{5}$	= '5823 = 1'00

* Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (*see* page xxix).

The ratios in each year to the mean annual value are as follows :—

TABLE XXXIV.

Year ending June 30th, 1844*	-	-	-	0'77
" " 1845	-	-	-	0'48
" " 1846	-	-	-	0'65
" " 1847	-	-	-	1'25
" " 1848	-	-	-	1'81

Table XXXV. exhibits the aggregate values in the different years divided into Disturbances increasing the force, and Disturbances decreasing the force.

TABLE XXXV.

Year ending June 30th, 1844	-	.	Increasing.	Decreasing.		
			'2011	'2480 parts of the Total Force.		
" " 1845	-	.	'0616	'2159	"	"
" " 1846	-	.	'1363	'2146	"	"
" " 1847	-	.	'1839	'5451	"	"
" " 1848	-	.	'4067	'6680	"	"
Total in the five years	-	.	'9896	1'9219		

The general effect of the larger disturbances of the Total Force is to decrease the total magnetic force more than to increase it.

The ratio of the values of the disturbances decreasing the Total Force to those which increase it, on the average of the five years, is 1'94 to 1. The ratios in the several years are as follows :—

TABLE XXXVI.

Year ending June 30th, 1844	-	.	.	.	as 1'23 to 1
" " 1845	-	.	.	.	as 3'51 to 1
" " 1846	-	.	.	.	as 1'79 to 1
" " 1847	-	.	.	.	as 2'96 to 1
" " 1848	-	.	.	.	as 1'64 to 1

* Including five months (October to February) substituted from the preceding year (see page xxix.)

Table XXXVII. exhibits the aggregate values of the disturbances distributed into the different *months* of their occurrence; with the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXXVII.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - -	'0447	'0151	'0294	'0668	'0338	'1898	0'78	July.
August - -	'0244	'0349	'0437	'1161	'0384	'2575	1'06	August.
September - -	'0457	'0587	'0292	'1339	'1302	'3977	1'64	September.
October - -	'0415	'0524	'0205	'0688	'1464	'3296	1'36	October.
November - -	'0515	'0317	'0257	'0170	'0604	'1863	0'77	November.
December - -	'0677	'0033	'0265	'0047	'1538	'2560	1'05	December.
January - -	'0296	'0260	'0128	'0120	'0476	'1280	0'52	January.
February - -	'0026	'0144	'0132	'0256	'1237	'1795	0'74	February.
March - -	'0605	'0136	'0169	'0625	'1012	'2547	1'05	March.
April - -	'0633	'0074	'0551	'1332	'1163	'3753	1'55	April.
May - -	'0164	'0144	'0675	'0711	'0929	'2623	1'08	May.
June - -	'0012	'0056	'0404	'0176	'0300	'0948	0'39	June.
Total in the five years - -						2'9115	parts of the Total Force.	
Mean monthly value						$\frac{2'9115}{12} = '2426$	$= 1'00$	

The anomaly in the month of December, which is the only exception to a periodical variation having its maxima at the epochs of the equinoxes and its minima at those of the solstices, was occasioned by the excessive and unusual disturbances in December 1847. If the ratio for December be taken from the value of the disturbances in that month in the four years ending respectively June 30th, 1844, 1845, 1846, and 1847, compared with the mean monthly value in the same years, it is found to be 0.66, which would place it in its natural order in the progression. We may, therefore, regard the general progression of the annual variation of the Total Force depending on the larger disturbances to be from a maximum at each of the equinoxes to a minimum at each of the solstices, and *vice versa*; and the month of December 1847 as forming an accidental exception, presenting a decided anomaly in that particular year, but which might possibly disappear if the month were comprehended in observations continued through a longer series of years than are here combined.

Tables XXXVIII. and XXXIX. exhibit the aggregate monthly values in the different years separated into disturbances increasing and disturbances decreasing the force.

ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE XXXVIII.

Disturbances increasing the Total Force.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - - -	'0154	'0004	'0062	'0115	'0152	'0187	0.59	July.
August - - -	'0078	'0107	'0087	'0174	'0091	'0537	0.65	August.
September - - -	'0258	'0044	'0016	'0329	'0554	'1201	1.45	September.
October - - -	'0215	'0084	'0105	'0142	'0367	'0913	1.10	October.
November - - -	'0201	'0080	—	'0039	'0414	'0734	0.89	November.
December - - -	'0580	—	'0176	'0041	'0581	'1378	1.67	December.
January - - -	'0106	'0188	'0024	'0095	'0181	'0594	0.72	January.
February - - -	'0016	'0009	'0025	'0100	'0426	'0576	0.70	February.
March - - -	'0175	'0046	'0068	'0262	'0413	'0964	1.17	March.
April - - -	'0186	'0025	'0316	'0350	'0370	'1247	1.51	April.
May - - -	'0042	'0020	'0367	'0100	'0363	'0892	1.08	May.
June - - -	—	'0009	'0117	'0092	'0155	'0373	0.45	June.

Total in the five years - - - '9896 parts of the Total Force.

Mean monthly value $\frac{'9896}{12} = '0825 = 1.00$

TABLE XXXIX.

Disturbances decreasing the Total Force.

Months.	In the Years ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - - -	'0293	'0147	'0232	'0553	'0186	'1411	0.88	July.
August - - -	'0166	'0242	'0350	'0987	'0293	'2038	1.27	August.
September - - -	'0199	'0543	'0276	'1010	'0748	'2776	1.73	September.
October - - -	'0200	'0440	'0100	'0546	'1097	'2383	1.49	October.
November - - -	'0314	'0237	'0257	'0131	'0190	'1129	0.70	November.
December - - -	'0097	'0033	'0089	'0066	'0957	'1182	0.74	December.
January - - -	'0190	'0072	'0104	'0025	'0295	'0686	0.43	January.
February - - -	'0010	'0135	'0107	'0156	'0811	'1219	0.76	February.
March - - -	'0430	'0090	'0101	'0363	'0599	'1583	0.99	March.
April - - -	'0447	'0049	'0235	'0982	'0793	'2506	1.56	April.
May - - -	'0122	'0124	'0308	'0611	'0566	'1731	1.08	May.
June - - -	'0012	'0047	'0287	'0084	'0145	'0575	0.36	June.

Total in the five years - - - 1'9219 parts of the Total Force.

Mean monthly value $\frac{1'9219}{12} = '1602 = 1.00$

TOTAL FORCE : DISTURBANCES.

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Both the disturbances which increase the Total Force and those which decrease it show the same periodical law of monthly variation which has been pointed out in the remarks on Table XXXVII., in which they were exhibited conjointly. In both, the equinoxes are epochs of maxima and the solstices of minima. In the disturbances decreasing the force, the progression from the minima to the maxima and from the maxima to the minima is continuous and uninterrupted. In those increasing the force, December is the only interruption, and ceases to be so if the ratio be taken from the four years ending June 30th, 1844, 1845, 1846, and 1847; omitting the year ending June 30th, 1848. The excessive disturbances in December 1847 are seen by Tables XXXVIII. and XXXIX. to have been chiefly disturbances increasing the Total Force.

Table XL. exhibits the aggregate values of the disturbances distributed into the different hours of their occurrence; together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XL.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
h.								h.
18	'0257	'0185	'0136	'0409	'0655	'1642	1'35	6 a.m.
19	'0267	'0127	'0105	'0371	'0759	'1629	1'34	7 a.m.
20	'0190	'0064	'0123	'0281	'0381	'1039	0'86	8 a.m.
21	'0139	'0045	'0060	'0157	'0268	'0669	0'55	9 a.m.
22	'0099	'0015	'0033	'0050	'0123	'0320	0'26	10 a.m.
23	'0058	'0013	'0024	'0012	'0107	'0214	0'17	11 a.m.
0	'0066	'0005	'0054	'0046	'0130	'0301	0'25	Noon.
1	'0135	'0024	'0076	'0120	'0228	'0583	0'48	1 p.m.
2	'0123	'0039	'0108	'0169	'0337	'0776	0'64	2 p.m.
3	'0143	'0040	'0141	'0252	'0353	'0929	0'76	3 p.m.
4	'0171	'0063	'0225	'0229	'0474	'1162	0'96	4 p.m.
5	'0224	'0117	'0191	'0277	'0434	'1243	1'02	5 p.m.
6	'0181	'0082	'0148	'0251	'0357	'1019	0'84	6 p.m.
7	'0235	'0072	'0134	'0205	'0458	'1104	0'91	7 p.m.
8	'0165	'0063	'0080	'0176	'0395	'0879	0'72	8 p.m.
9	'0120	'0075	'0104	'0164	'0285	'0748	0'62	9 p.m.
10	'0141	'0078	'0144	'0364	'0268	'0995	0'82	10 p.m.
11	'0191	'0094	'0158	'0359	'0370	'1172	0'97	11 p.m.
12	'0261	'0270	'0272	'0488	'0610	'1901	1'57	Midnight.
13	'0244	'0254	'0267	'0661	'0743	'2169	1'78	1 a.m.
14	'0257	'0292	'0300	'0634	'0767	'2250	1'85	2 a.m.
15	'0292	'0309	'0339	'0625	'0821	'2386	1'97	3 a.m.
16	'0207	'0245	'0321	'0578	'0708	'2059	1'70	4 a.m.
17	'0325	'0230	'0240	'0415	'0716	'1926	1'59	5 a.m.
Total in the five years - - -						2'9115 parts of the Total Force.		
Mean hourly value						$\frac{2'9115}{24} = '1213 = 1'00$		

The law which regulates the occurrence in the *diurnal* period of the disturbances of larger amount of the Total Force is here in its principal features sufficiently distinct and obvious. From 8 A.M. to 11 P.M. inclusive the disturbance at every hour is less than at any hour from midnight to 7 A.M. inclusive. It is a minimum at 11 A.M., and a maximum at 3 A.M., the disturbance at the hour of maximum being about eleven times greater than at the minimum hour. From the maximum at 3 A.M. to the minimum at 11 A.M. the progression is continuous and uninterrupted: from the minimum at 11 A.M. to the maximum at 3 A.M. the progression is interrupted in the afternoon by secondary small maxima at 5 and 7 P.M., with corresponding secondary minima at 6 P.M. and 9 P.M., but from the secondary minimum at 9 P.M. to the principal maximum at 3 A.M. the progression is continuous and uninterrupted.

Tables XLI. and XLII. show the aggregate hourly values in the different years, separated into disturbances increasing and disturbances decreasing the force; with the ratio of the values at each hour to the respective mean hourly values.

TABLE XLI.

Disturbances increasing the Force.

Toronto Astronomical Time.	In the Year ending June 30,					Suma in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
11.								11.
18	'0045	'0004	'0022	—	'0042	'0113	0'27	6 a.m.
19	'0060	—	'0012	'0004	'0029	'0105	0'25	7 a.m.
20	'0058	'0009	'0026	'0011	'0043	'0147	0'36	8 a.m.
21	'0055	—	'0004	'0004	'0025	'0088	0'21	9 a.m.
22	'0038	—	'0009	'0004	'0049	'0100	0'24	10 a.m.
23	'0040	'0005	'0016	'0008	'0088	'0157	0'38	11 a.m.
0	'0056	'0005	'0040	'0046	'0122	'0269	0'65	Noon.
1	'0100	'0024	'0044	'0116	'0216	'0500	1'21	1 p.m.
2	'0105	'0039	'0085	'0161	'0325	'0715	1'73	2 p.m.
3	'0122	'0040	'0137	'0231	'0353	'0883	2'14	3 p.m.
4	'0149	'0062	'0211	'0210	'0174	'1107	2'69	4 p.m.
5	'0196	'0117	'0177	'0260	'0434	'1184	2'87	5 p.m.
6	'0150	'0078	'0126	'0247	'0357	'0958	2'32	6 p.m.
7	'0192	'0068	'0119	'0192	'0454	'1025	2'49	7 p.m.
8	'0139	'0055	'0064	'0152	'0386	'0796	1'93	8 p.m.
9	'0079	'0037	'0080	'0069	'0228	'0493	1'19	9 p.m.
10	'0062	'0028	'0041	'0036	'0159	'0326	0'79	10 p.m.
11	'0069	'0022	'0028	'0018	'0074	'0211	0'51	11 p.m.
12	'0061	'0012	'0035	'0004	'0080	'0192	0'46	Midnight.
13	'0054	'0010	'0015	'0004	'0030	'0113	0'27	1 a.m.
14	'0046	—	'0012	'0016	'0025	'0099	0'24	2 a.m.
15	'0048	—	'0020	'0021	'0033	'0122	0'30	3 a.m.
16	'0023	—	'0016	'0021	'0013	'0073	0'18	4 a.m.
17	'0064	—	'0024	'0004	'0028	'0120	0'29	5 a.m.
Total in the five years						'9896 parts of the force.		
Mean hourly value						'9896 24	=	'0412 = 1'00

TOTAL FORCE: DISTURBANCES.

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TABLE XLII.

Disturbances decreasing the Force.

Toronto Astrono- mical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
11.								11.
18	'0212	'0181	'0114	'0409	'0613	'1529	1'91	6 a.m.
19	'0207	'0127	'0093	'0367	'0730	'1524	1'90	7 a.m.
20	'0132	'0055	'0097	'0270	'0338	'0892	1'11	8 a.m.
21	'0084	'0045	'0056	'0153	'0243	'0581	0'73	9 a.m.
22	'0061	'0015	'0024	'0046	'0074	'0220	0'27	10 a.m.
23	'0018	'0008	'0009	'0004	'0019	'0057	0'07	11 a.m.
0	'0010	—	'0014	—	'0008	'0032	0'04	Noon.
1	'0035	—	'0032	'0004	'0012	'0083	0'10	1 p.m.
2	'0018	—	'0023	'0008	'0012	'0061	0'08	2 p.m.
3	'0021	—	'0004	'0021	—	'0046	0'06	3 p.m.
4	'0022	—	'0014	'0019	—	'0055	0'07	4 p.m.
5	'0028	—	'0014	'0017	—	'0059	0'07	5 p.m.
6	'0031	—	'0026	'0004	—	'0061	0'08	6 p.m.
7	'0043	—	'0019	'0013	'0004	'0079	0'10	7 p.m.
8	'0026	'0004	'0020	'0024	'0009	'0083	0'10	8 p.m.
9	'0041	'0033	'0029	'0095	'0057	'0255	0'32	9 p.m.
10	'0079	'0046	'0107	'0328	'0109	'0669	0'84	10 p.m.
11	'0122	'0067	'0135	'0341	'0296	'0961	1'20	11 p.m.
12	'0200	'0258	'0237	'0484	'0530	'1709	2'13	Midnight.
13	'0190	'0244	'0252	'0657	'0713	'2056	2'57	1 a.m.
14	'0211	'0292	'0288	'0618	'0742	'2151	2'69	2 a.m.
15	'0244	'0309	'0319	'0604	'0788	'2264	2'83	3 a.m.
16	'0184	'0245	'0305	'0557	'0695	'1986	2'48	4 a.m.
17	'0261	'0230	'0216	'0411	'0688	'1806	2'25	5 a.m.
Total in the five years - - -						1'9219 parts of the Total Force.		
Mean hourly value - $\frac{1'9219}{24}$ =						'0801 = 1'00		

When Tables XLI. and XLII. are examined, it is seen that the disturbances increasing the force and those decreasing it, may be generally viewed as parts of one and the same phenomenon, subject to one and the same law, expressed by ratios which in the two cases are approximately the complement of each other, viz., at the hours when the one augments in value, the other diminishes, and *vice versa*; and that the two classes of disturbances, distinguished from each other by the opposite effects which each produces on the mean or normal state of the magnetic force, do in fact constitute when viewed together a diurnal variation of very striking order and regularity, having a maximum of increased force at a certain hour, and a maximum of diminished force at another hour distant nearly twelve hours from the preceding, and forming a regular progression from the hour of the greatest increased force to that of greatest diminished force, and *vice versa*. To see this in its just light, and to obtain the true

proportions in which the magnetic force is increased or diminished at the different hours by the effects of the disturbances, it is necessary to combine the values in Tables XLI. and XLII. somewhat differently from what is done in Table XL., by taking the *differences* instead of the *sums* of the increasing and decreasing values. When we take the sums we investigate the proportion which the *whole amount* of disturbance, whether its effect be to increase or to decrease the force, bears at each hour to the mean hourly value or average of all the hours: the ratios in this case are shown in Table XL. When, on the other hand, we take the differences, we exhibit the amount by which the magnetic force of the earth is either increased or decreased at the several hours by the influence of the disturbances of '0004 and upwards during five years. This is shown in column 4 of Table XLIII.; the values are in parts of the Total Force at Toronto.

TABLE XLIII.

Hours.	Disturbances		General Effect, or accumulated influence at each of the 24 hours in 5 Years.	Average Daily Effect at the different hours.
	Increasing.	Decreasing.		
(1.)	(2.)	(3.)	(4.)	(5.)
18; or 6 A.M. - -	+ '0113	- '1529	- '1416	- '000092
19; or 7 A.M. - -	+ '0105	- '1524	- '1419	- '000082
20; or 8 A.M. - -	+ '0147	- '0892	- '0745	- '000047
21; or 9 A.M. - -	+ '0088	- '0581	- '0493	- '000032
22; or 10 A.M. - -	+ '0100	- '0220	- '0120	- '000008
23; or 11 A.M. - -	+ '0157	- '0057	+ '0100	+ '000007
0; or Noon - - -	+ '0269	- '0032	+ '0237	+ '000015
1; or 1 P.M. - - -	+ '0500	- '0083	+ '0117	+ '000027
2; or 2 P.M. - - -	+ '0715	- '0061	+ '0654	+ '000042
3; or 3 P.M. - - -	+ '0883	- '0046	+ '0837	+ '000054
4; or 4 P.M. - - -	+ '1107	- '0055	+ '1052	+ '000068
5; or 5 P.M. - - -	+ '1184	- '0059	+ '1125	+ '000073
6; or 6 P.M. - - -	+ '0958	- '0061	+ '0897	+ '000058
7; or 7 P.M. - - -	+ '1025	- '0079	+ '0946	+ '000062
8; or 8 P.M. - - -	+ '0796	- '0083	+ '0713	+ '000047
9; or 9 P.M. - - -	+ '0493	- '0255	+ '0238	+ '000016
10; or 10 P.M. - -	+ '0326	- '0669	- '0343	- '000022
11; or 11 P.M. - -	+ '0211	- '0961	- '0750	- '000047
12; or Midnight - -	+ '0192	- '1709	- '1517	- '000098
13; or 1 A.M. - - -	+ '0113	- '2056	- '1943	- '000125
14; or 2 A.M. - - -	+ '0099	- '2151	- '2052	- '000132
15; or 3 A.M. - - -	+ '0122	- '2264	- '2142	- '000138
16; or 4 A.M. - - -	+ '0073	- '1986	- '1913	- '000123
17; or 5 A.M. - - -	+ '0120	- '1806	- '1686	- '000109

We learn from this table that the law of the diurnal variation due to the disturbances of the Total Force at Toronto is as follows;—From 11 A.M. to 9 P.M. inclusive they augment the force; from 10 P.M. to 10 A.M. inclusive they diminish it. The hour of greatest augmentation is 5 P.M.; of greatest diminution 3 A.M. The decreasing effect changes to an increasing effect about midway between 10 and 11 A.M.; the increasing

to a decreasing between 9 and 10 P.M., nearer to 9 than to 10. The greatest diminution is nearly twice as great as the greatest augmentation. The hours of most rapid change are from 7 to 8 A.M., and from 11 P.M. to midnight. From the greatest diminution at 3 A.M. to the greatest increase at 5 P.M. the progression is continuous and uninterrupted, and from the greatest increase at 5 P.M. to the greatest decrease at 3 A.M. it is also continuous, except in a small and apparently accidental interruption at 7 P.M. As the values in column 4 of Table XLIII. are the accumulated values in five years, and as each year comprised about 310 days of observation (or 1,550 days in the five years) we may take an approximate view of the *mean* diurnal variation due to the disturbances equalling or exceeding '0004 in amount. An increase of force at 5 P.M. of '1125 divided by 1,550 days = '000073; and a decrease of force at 3 A.M. of '2142 divided by 1550 = '000138; making together an average diurnal range of '000211 parts of the force, changing progressively from + '000073 at 5 P.M. to - '000138 at 3 A.M.

As it is not probable, on the one hand, that the disturbances of '0004 and upwards comprehend all the disturbances of the class to which they belong, we may regard the preceding range as expressing the minimum limit of the true average daily range of variation due to the disturbances of occasional occurrence; whilst, on the other hand, it appears extremely improbable that the minor effects of the causes which produce the larger disturbances should equal in aggregate value those which exceed '0004. We have, then, the same degree of improbability that the range of the diurnal variation due to all the disturbances of this class should amount to twice the value which has been obtained by this analysis, or to $'000211 \times 2 = '000422$. The diurnal range may be regarded as something between '000211 and '000422, but probably nearer to the first than to the last. The final column of Table XLIII. (column 5) shows the average daily effect of the disturbances of '0004 and upwards at every hour of the day and night.

DECLINATION.

Analysis of the larger Disturbances.—To complete the view of the magnetic disturbances at Toronto in the five years ending June 30th 1848, a second and a more perfect analysis has been made of the disturbances of the Declination during that period than that which is contained in the second volume of the Toronto Observations (pp. xxvii—1), which was deemed sufficient for a first approximation when other duties pressed heavily on the time at command.

The disturbances which were then subjected to analysis, were those which differed five scale divisions (3'·6 in arc) or upwards from the mean or normal positions of the magnet in the same month and at the same hour, the normal positions being derived from the whole body of the observations, excluding only some very extreme disturbances. The more perfect mode of proceeding is that which has been stated in describing the process adopted in the cases of the Horizontal and Vertical Forces; viz. the subsequent correction of the normal positions by a recalculation in which the *whole* of the disturbances are excluded, and a revision of the disturbances in conformity with the new normals; both processes being repeated until the normals finally adopted are derived from a body of observations including all which differ less, and excluding all which differ more, than a certain fixed value from themselves. At the same time this fixed value has itself been altered by raising the standard considered to constitute a disturbed observation from five scale divisions to seven (*i.e.* from 3'·6 to 5'·0 of arc), the experience gained in the former investigation having led to the belief that the higher value would constitute in some respects a preferable standard. The number of observations thus separated amounted to 2,172 in the five years of hourly observations ending June 30th 1848, averaging about 1 in 17 of the whole body.

The aggregate values of the disturbed observations in the different years are shown in the following table:—

TABLE XLIV.

Year ending June 30th 1844	-	-	-	2053'·2	minutes of arc.
" " 1845	-	-	-	2521'·8	"
" " 1846	-	-	-	3246'·6	"
" " 1847	-	-	-	5478'·7	"
" " 1848	-	-	-	6422'·0	"
Total in the five years	-	-	-	19722'·3	
Mean annual value	-	-	-	$\frac{19722'·3}{5}$	= 3944'·5

DECLINATION: DISTURBANCES.

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The ratios in each year to the mean annual value are as follow:—

TABLE XLV.

Year ending June 30th 1844	-	-	-	-	-	0'52
" " 1845	-	-	-	-	-	0'64
" " 1846	-	-	-	-	-	0'82
" " 1847	-	-	-	-	-	1'39
" " 1848	-	-	-	-	-	1'63

The observations of the Declination were not interrupted in the months from October 1843 to February 1844; consequently the years ending June 30th 1844, 1845, 1846, 1847, and 1848 are here strictly what they profess to be, and the ratios show a continuous progression from a minimum in the first year to a maximum in the last.

Table XLVI. shows the aggregate values in the different years, divided into easterly and westerly disturbances.

TABLE XLVI.

Year ending June 30th	Easterly.	Westerly.
1844	1235'8	817'4
" 1845	1325'4	1196'4
" 1846	1973'3	1273'3
" 1847	2958'9	2519'8
" 1848	3573'5	2848'5
Total in the five years	11066'9	8655'4

The general effect of the larger disturbances is therefore to decrease the westerly Declination at Toronto. The easterly values preponderate in the ratio of 1'28 to 1.

Table XLVII. exhibits the aggregate values of the disturbances distributed into the different *months* of their occurrence, with the ratios which the values in each of the months bear to the mean monthly value or average of all the months.

TABLE XLVII.

Months.	Years ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	327'9	160'8	159'3	565'1	329'5	1542'6	0'94	July.
August	131'1	280'5	355'4	885'3	242'7	1895'0	1'15	August.
September	164'6	450'1	371'5	828'4	848'9	2663'5	1'62	September.
October	122'7	341'4	263'9	608'5	808'2	2144'7	1'31	October.
November	30'9	305'6	161'8	314'1	469'6	1282'0	0'78	November.
December	50'2	197'0	181'7	124'5	691'4	1244'8	0'76	December.
January	65'5	250'9	142'1	89'6	387'9	936'0	0'57	January.
February	119'4	132'6	125'6	259'8	746'4	1383'8	0'84	February.
March	403'8	106'5	308'5	481'7	524'2	1824'7	1'11	March.
April	389'5	151'0	312'3	750'2	726'0	2329'0	1'42	April.
May	193'1	65'0	349'7	408'5	587'5	1603'8	0'98	May.
June	54'5	80'4	514'8	163'0	59'7	872'4	0'53	June.
Total in the five years						19722'3		
Mean monthly value, $\frac{19722'3}{12}$						=	1643'5	= 1'00

September and April are the months of greatest disturbance, and January and June the months of least disturbance. The progression from the maxima to the minima, and from the minima to the maxima, is continuous and uninterrupted.

Table XLVIII. exhibits the aggregate monthly values in the five years separated into easterly and westerly values, with the ratios in each case to the respective mean monthly values, and also the ratios in the different months of the easterly to the westerly values.

TABLE XLVIII.

Months.	Easterly Values.		Westerly Values.		Ratio of the Easterly to the Westerly Values.	Months.
	Sums in the Five Years.	Ratios to the Mean Monthly Values.	Sums in the Five Years.	Ratios to the Mean Monthly Values.		
July	903.2	0.98	639.4	0.89	1.41	July.
August	1255.2	1.36	639.8	0.89	1.96	August.
September	1504.8	1.63	1158.7	1.61	1.29	September.
October	1174.0	1.28	970.7	1.35	1.21	October.
November	556.6	0.60	725.4	1.06	0.77	November.
December	527.4	0.57	717.4	0.99	0.74	December.
January	527.0	0.57	409.0	0.57	1.29	January.
February	772.9	0.84	610.9	0.84	1.27	February.
March	1062.9	1.15	761.8	1.06	1.40	March.
April	1487.5	1.29	1141.5	1.59	1.04	April.
May	904.3	0.98	699.5	0.98	1.29	May.
June	691.1	0.75	181.3	0.25	3.82	June.
Total in the five years, 11066.9			8655.3			
Mean monthly values = 922.2 = 1.00			721.3 = 1.00			

The same general law is seen to prevail in both easterly and westerly disturbances when separately viewed as when they are viewed conjointly; the equinoxes are the epochs of maximum and the solstices of minimum.

The ratios which indicate the proportion in which the easterly disturbances preponderate over the westerly exhibit, on the other hand, a tendency towards a maximum at the June solstice and a minimum at the December solstice. The mean ratio in the months of November, December, and January is 0.93, and in the months of May, June, and July 2.17.

The next table exhibits the aggregate values of the disturbed observations distributed into the different *hours* of their occurrence, with the ratios which the values at each hour bear to the mean hourly value or average of all the hours.

DECLINATION: DISTURBANCES.

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TABLE XLIX.

Toronto Astronomical Time.	Years ending June 30,					Sum in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
11.								
18	93.4	145.3	122.7	206.7	295.6	863.7	1.05	6 a.m.
19	70.7	98.8	139.8	269.0	383.6	961.9	1.17	7 a.m.
20	67.6	122.2	136.4	297.0	423.5	1066.7	1.27	8 a.m.
21	59.1	84.0	129.7	210.2	427.9	910.9	1.11	9 a.m.
22	50.6	89.0	112.2	148.6	311.8	712.2	0.87	10 a.m.
23	37.5	100.2	83.8	119.4	197.3	538.2	0.66	11 a.m.
0	26.2	75.1	57.5	55.2	186.1	499.4	0.59	Noon.
1	29.3	28.8	31.2	42.7	112.6	244.6	0.30	1 p.m.
2	26.8	63.4	23.0	67.7	146.1	327.0	0.40	2 p.m.
3	28.1	57.9	—	105.1	134.9	326.0	0.40	3 p.m.
4	47.9	52.7	40.2	150.9	140.1	441.8	0.53	4 p.m.
5	66.9	51.7	59.3	159.0	144.4	451.3	0.56	5 p.m.
6	97.3	38.2	70.8	262.3	217.9	686.5	0.84	6 p.m.
7	62.8	101.1	225.9	257.4	156.9	804.1	0.98	7 p.m.
8	139.2	186.3	152.5	295.0	228.1	1001.1	1.22	8 p.m.
9	176.3	243.3	254.8	387.1	433.2	1494.7	1.82	9 p.m.
10	220.5	178.9	254.9	380.5	232.2	1267.0	1.55	10 p.m.
11	109.3	97.0	173.5	329.8	344.5	1024.1	1.25	11 p.m.
12	158.2	139.1	193.7	270.5	344.8	1106.3	1.35	Midnight.
13	119.2	118.0	254.1	369.9	389.4	1250.6	1.52	1 a.m.
14	86.7	127.0	176.3	289.5	308.9	988.4	1.21	2 a.m.
15	110.8	74.6	185.0	248.6	307.0	926.0	1.13	3 a.m.
16	69.4	163.1	186.1	329.6	348.3	1096.5	1.34	4 a.m.
17	99.7	82.3	184.5	225.9	266.6	858.0	1.05	5 a.m.

Total in the five years - - - 19722.3

Mean hourly value, $\frac{19722.3}{24} = 821.8 = 1.00$

From 10 A.M. to 7 P.M. inclusive the ratios are invariably below unity, and from 8 P.M. to 9 A.M. inclusive as invariably above unity. The hour of least disturbance is 1 P.M., and of greatest 9 P.M., both being well-marked features. The progression during the hours of the day from 8 A.M. to 9 P.M. is uninterrupted to and from the minimum at 1 P.M., but is much less regular during the hours of the night.

Table L. exhibits the aggregate values separated into their easterly and westerly constituents, with the ratios at each hour to the mean hourly value or average of all the hours.

TABLE L.

Toronto Astronomical Time.	Disturbances.		Ratios.		Toronto Civil Time.
	Easterly.	Westerly.	Easterly.	Westerly.	
18	207.8	655.9	0.45	1.82	6 a.m.
19	160.2	801.7	0.35	2.23	7 a.m.
20	118.1	928.6	0.26	2.58	8 a.m.
21	99.2	811.8	0.21	2.25	9 a.m.
22	128.0	584.2	0.28	1.62	10 a.m.
23	179.9	358.3	0.39	1.00	11 a.m.
0	111.8	289.6	0.24	0.80	Noon.
1	97.7	146.9	0.21	0.41	1 p.m.
2	93.2	233.8	0.20	0.65	2 p.m.
3	102.6	223.4	0.22	0.62	3 p.m.
4	145.1	286.7	0.32	0.80	4 p.m.
5	200.1	254.2	0.44	0.71	5 p.m.
6	481.5	205.0	1.05	0.57	6 p.m.
7	664.9	139.2	1.44	0.39	7 p.m.
8	899.6	101.8	1.95	0.28	8 p.m.
9	1417.1	77.6	3.09	0.22	9 p.m.
10	1104.7	162.2	2.41	0.45	10 p.m.
11	925.4	98.7	2.02	0.27	11 p.m.
12	808.9	297.4	1.76	0.82	Midnight.
13	824.5	426.1	1.79	1.19	1 a.m.
14	627.6	360.8	1.37	1.00	2 a.m.
15	589.5	336.5	1.28	0.94	3 a.m.
16	662.5	434.0	1.45	1.21	4 a.m.
17	417.0	441.0	0.91	1.23	5 a.m.
Total in the five years. }	11066.9	8655.4			
Mean hourly values. }	461.1	360.6			

The easterly disturbances are below the average during the hours of the day, or from 5 A.M. to 5 P.M. inclusive, and above the average during the hours of the night, or from 6 P.M. to 4 A.M. inclusive; the westerly disturbances are below the average from noon to midnight inclusive, and above the average, with a single exception at 3 A.M., from 1 A.M. to 11 A.M. inclusive. The easterly have a maximum and the westerly a minimum, both decided features, at 9 P.M.; the westerly have a well-marked maximum at 8 A.M., and the easterly have minima scarcely differing from each other at 9 A.M. and at 1, 2, and 3 P.M. From noon to 5 P.M. both easterly and westerly disturbances are below their respective averages, consequently these are the hours of least general disturbance. From 6 P.M. to 11 P.M. the easterly are so much above their average that they more than compensate for the deficiency of the westerly; from midnight to 5 A.M. both easterly and westerly are above their respective averages (with the slight and apparently accidental exception already noticed at 3 A.M.), and from 6 A.M. to 10 A.M. the high values of the westerly more than compensate for the low values of the easterly disturbances. Excepting at the hours from noon to 5 P.M. inclusive,

when both easterly and westerly disturbances are small, and from 1 A.M. to 5 A.M., when they are both large, there is a systematic tendency to a diminution of easterly disturbance at the hours when large westerly disturbance prevails, and to a diminution of westerly disturbance when large easterly disturbance prevails.

In the following table is shown for each hour (in column 2) the excess of easterly disturbance over westerly, or of westerly over easterly, in the aggregate values of the five years; and in column 3 the mean effect at each hour, or a *daily* average, obtained by dividing the accumulated excess in five years shown in column 2 by 1,552, the number of days of observation in the five years. Column 3, therefore, exhibits the *mean diurnal* variation produced on a general average by the disturbances amounting to or exceeding 5'0 of arc, and which, as a general and systematic effect, is superimposed upon the more regularly occurring diurnal variation derivable from the great body of the observations after the disturbed observations have been individually abstracted.

TABLE LI.

Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.	Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.
	(2.)	(3.)			(2.)	(3.)	
18.	448'1 W.	0'29 W.	6 a.m.	6	276'5 E.	0'18 E.	6 p.m.
19	641'5 W.	0'41 W.	7 a.m.	7	525'7 E.	0'34 E.	7 p.m.
20	810'5 W.	0'52 W.	8 a.m.	8	797'8 E.	0'52 E.	8 p.m.
21	712'6 W.	0'46 W.	9 a.m.	9	1339'5 E.	0'87 E.	9 p.m.
22	456'2 W.	0'30 W.	10 a.m.	10	942'5 E.	0'61 E.	10 p.m.
23	178'4 W.	0'11 W.	11 a.m.	11	826'7 E.	0'53 E.	11 p.m.
0	177'8 W.	0'11 W.	Noon.	12	511'5 E.	0'33 E.	Midnight.
1	49'2 W.	0'03 W.	1 p.m.	13	398'4 E.	0'26 E.	1 a.m.
2	140'6 W.	0'09 W.	2 p.m.	14	266'8 E.	0'17 E.	2 a.m.
3	120'8 W.	0'08 W.	3 p.m.	15	253'0 E.	0'16 E.	3 a.m.
4	141'6 W.	0'09 W.	4 p.m.	16	228'5 E.	0'15 E.	4 a.m.
5	54'1 W.	0'04 W.	5 p.m.	17	24'0 W.	0'02 W.	5 a.m.

It is seen by this table that when a daily average is derived from all the disturbances of larger amount (5'0 and upwards) occurring in five years at Toronto they are found to produce a maximum easterly deflection of the Declination magnet of 0'87 at 9 p.m., and a maximum westerly deflection of 0'52 at 8 a.m., the intermediate progression either way being continuous, and only interrupted by a few slight irregularities occurring in the hours of the afternoon when the disturbances are fewest and of least amount. The range is $0'87 + 0'52 = 1'39$, which might possibly be increased to 2'0 if the disturbances of the same class which are less than 5'0 could be separated and included in the analysis.

Table LII. contains the hourly normals of the Declination for each month from July 1843 to June 1848 inclusive, omitting disturbed observations in which the amount of disturbance equalled or exceeded 7'0 scale divisions or 5'0 of arc.

TABLE LII.

Hourly Means of the Readings of the Declinometer; omitting disturbed Observations in which

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.										
	0	1	2	3	4	5	6	7	8	9	10
	TORONTO HOURS.										
	18	19	20	21	22	23	0	1	2	3	4
1843:											
July -	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
August -	131'8	133'7	133'0	131'1	126'8	122'9	119'3	117'2	117'7	118'8	120'7
September -	131'1	133'7	133'2	130'3	125'0	121'0	117'0	116'2	117'3	119'5	122'5
October -	129'4	131'7	130'7	127'8	123'4	119'8	116'7	116'5	118'1	119'9	122'4
November -	126'8	128'1	129'4	129'2	126'7	123'2	120'8	120'1	120'3	121'4	122'5
December -	127'8	128'3	129'0	128'7	126'5	123'4	122'1	121'3	122'2	123'3	124'5
	127'4	127'7	127'6	128'4	127'7	125'8	123'6	122'5	122'0	123'6	124'6
1844:											
January -	127'1	127'5	128'7	129'6	127'7	125'7	123'1	122'2	122'3	123'3	124'3
February -	128'2	129'0	129'2	128'8	126'5	124'0	121'8	121'3	122'3	123'8	125'2
March -	129'1	129'8	131'0	130'3	127'8	124'0	120'5	119'5	119'5	120'5	121'7
April -	129'1	130'1	130'9	129'3	126'2	121'7	119'1	118'0	118'0	119'3	120'7
May -	130'4	131'4	131'2	129'6	125'5	121'4	118'2	116'5	116'2	117'3	119'8
June -	130'3	131'5	131'3	129'0	124'4	119'6	116'1	114'6	115'3	116'7	118'8
July -	129'1	132'3	132'2	129'8	125'3	120'5	118'0	115'7	115'0	116'8	119'0
August -	130'1	131'5	131'6	127'9	122'8	117'2	115'0	112'8	114'9	115'6	119'5
September -	123'9	125'0	123'9	121'1	116'3	111'5	108'4	109'9	110'8	114'1	117'5
October -	120'8	122'1	122'4	121'4	118'4	114'6	112'3	112'1	112'7	115'1	116'2
November -	118'5	119'3	120'5	120'5	118'5	115'1	113'2	112'0	113'6	114'7	115'6
December -	118'7	118'6	119'0	119'8	119'5	116'9	114'6	113'6	113'5	115'5	116'0
1845:											
January -	117'7	119'8	120'8	119'9	117'8	115'2	113'2	113'1	113'5	115'3	116'2
February -	119'6	120'2	120'5	120'4	118'7	116'0	113'3	112'3	113'0	114'7	116'5
March -	119'7	121'6	122'8	122'5	120'1	116'1	112'7	110'4	110'5	111'3	112'5
April -	121'0	122'3	123'3	122'6	118'5	115'0	110'2	107'6	107'6	108'7	111'7
May -	122'9	124'3	124'0	121'2	115'8	110'4	107'6	107'4	108'1	110'4	113'1
June -	123'3	124'3	124'4	122'1	118'1	112'5	108'5	107'1	107'2	108'4	110'8
July -	121'4	123'7	124'3	123'0	118'7	113'1	108'6	106'1	105'9	107'0	109'1
August -	121'5	123'8	123'6	120'7	114'8	109'1	105'1	103'8	105'2	107'8	111'2
September -	118'2	119'2	118'9	115'7	111'1	107'2	104'7	105'0	106'7	108'8	111'5
October -	115'5	116'1	116'8	115'6	113'4	110'6	108'4	108'2	108'9	110'3	110'8
November -	114'8	116'4	117'2	116'4	114'0	110'2	107'6	108'0	108'8	110'1	111'8
December -	114'9	115'3	116'3	116'4	116'3	114'3	111'9	110'5	110'4	111'5	113'0

DECLINATION: TABLE OF NORMALS.

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TABLE LII.

the Amount of Disturbance equalled or exceeded 7.0 Scale Divisions or 5.0 Minutes of Arc.

in which

10	GÖTTINGEN HOURS												
	11	12	13	14	15	16	17	18	19	20	21	22	23
4	TORONTO HOURS.												
	5	6	7	8	9	10	11	12	13	14	15	16	17
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
120.7	123.4	125.0	124.9	124.5	125.4	125.2	125.2	127.1	126.7	126.0	126.0	127.1	128.0
122.5	124.3	124.8	125.0	124.6	125.2	124.9	125.0	124.8	124.7	126.4	125.8	126.2	128.2
122.4	123.6	124.2	124.2	125.4	127.2	125.4	124.5	126.0	126.0	126.0	126.1	125.6	126.7
122.5	123.9	124.7	125.4	125.5	126.1	125.9	126.5	125.2	126.0	125.8	125.6	126.5	126.6
124.5	125.2	126.6	127.5	127.3	127.1	127.2	127.3	126.1	125.8	125.5	126.0	126.9	127.2
124.6	126.0	126.9	127.1	127.6	127.9	127.7	127.1	126.7	126.1	125.5	126.0	126.4	126.9
124.3	125.5	126.2	127.3	127.4	127.9	128.2	127.2	126.6	126.5	126.5	126.9	127.4	126.2
125.2	125.5	125.7	126.3	127.4	127.6	127.7	127.0	126.3	126.5	126.3	127.2	127.4	128.6
121.7	123.8	124.6	126.0	126.2	125.9	127.1	127.4	127.5	127.0	127.2	126.6	127.7	128.0
120.7	122.5	123.8	123.5	125.7	125.2	126.4	127.6	126.0	126.0	126.4	126.3	126.7	127.9
119.8	121.8	122.9	124.0	123.5	124.7	124.7	125.2	124.0	125.4	125.4	125.3	125.7	128.2
118.8	121.0	122.1	122.6	122.7	122.6	123.4	124.4	123.4	124.1	124.7	124.3	126.0	128.1
119.0	120.9	122.6	123.3	122.7	123.1	124.1	124.1	124.6	125.1	124.0	124.2	125.0	127.4
119.5	121.9	123.3	123.5	123.3	123.0	123.7	123.9	124.2	123.9	123.5	123.0	124.5	126.2
117.5	118.4	118.7	118.3	119.0	118.7	119.7	118.2	120.2	119.0	120.0	119.8	121.9	122.0
116.2	116.5	117.4	117.9	119.0	118.2	119.3	118.3	118.7	118.1	118.7	118.1	119.2	119.6
115.6	116.9	117.9	118.9	118.3	119.0	119.1	118.9	118.7	117.4	117.0	118.1	117.7	118.1
116.0	116.8	117.9	118.3	118.8	119.6	118.8	119.8	118.5	117.9	116.9	117.1	117.6	118.3
116.2	117.2	118.4	118.5	119.0	119.1	119.0	118.3	117.3	117.6	117.9	117.9	119.3	118.2
116.5	116.5	117.8	117.6	118.3	120.0	118.6	118.1	118.9	117.3	117.5	118.1	118.6	118.3
125.5	114.7	116.4	117.7	117.5	117.7	118.6	118.7	118.3	118.1	118.7	118.5	118.7	118.9
11.7	114.7	116.4	117.1	117.0	117.0	117.2	118.6	117.4	117.8	117.2	118.2	118.5	119.3
13.1	115.6	116.3	116.1	116.3	115.7	115.9	115.3	116.1	116.8	116.8	117.6	118.4	120.3
10.8	113.7	115.3	115.5	115.1	115.2	115.1	115.9	115.6	116.3	116.1	115.8	117.8	120.3
09.1	111.6	114.0	114.9	114.1	114.8	116.1	116.3	115.3	115.9	114.7	115.1	116.2	118.7
11.2	113.2	115.0	114.4	114.0	114.9	115.2	115.7	114.8	115.0	114.5	115.1	115.0	117.9
11.5	113.4	114.0	114.3	114.1	114.2	113.1	113.7	114.0	114.0	115.8	115.8	116.8	117.5
10.8	111.7	112.1	112.9	112.8	113.7	113.7	113.8	114.2	114.0	115.0	115.7	115.6	116.5
11.8	112.4	113.4	114.7	114.6	114.6	114.4	113.6	113.4	113.2	113.9	113.1	114.6	
13.0	114.3	115.1	116.0	116.6	116.8	116.3	116.3	116.5	115.3	114.5	115.8	115.4	115.4

(Continued on p. lxiv.)

TABLE LII.—continued.

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.										
	0	1	2	3	4	5	6	7	8	9	10
	TORONTO HOURS.										
	18	'9	20	21	22	23	0	1	2	3	4
1846 :	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
January -	115'5	116'4	118'3	118'6	116'6	114'2	111'2	109'6	110'3	111'1	112'9
February -	115'6	116'4	117'8	117'1	115'2	112'9	110'6	109'3	109'3	110'4	111'9
March -	116'4	117'6	120'1	119'5	116'8	112'1	108'7	106'4	106'1	106'4	109'2
April -	117'5	119'4	119'4	117'7	114'4	109'5	106'7	104'4	104'7	105'0	107'4
May -	118'6	120'0	120'1	117'7	113'5	107'9	104'5	102'3	103'5	105'3	107'7
June -	119'5	121'2	120'7	119'0	115'8	111'4	107'8	104'9	104'1	105'2	106'3
July -	117'9	122'4	121'4	119'9	116'9	111'8	109'0	106'3	105'9	105'7	106'9
August -	118'5	122'0	121'8	119'8	113'9	109'3	105'0	103'7	103'0	104'4	107'2
September -	117'2	119'4	118'2	116'4	111'4	107'0	103'8	103'4	104'4	108'2	111'7
October -	115'7	116'2	118'0	117'0	114'8	110'7	107'6	106'4	106'4	108'6	110'3
November -	114'6	114'7	117'0	118'4	115'8	113'1	109'8	108'2	108'1	108'9	109'9
December -	114'9	115'5	116'5	117'7	116'5	113'9	110'7	109'4	109'0	109'7	110'7
1847 :											
January -	115'5	115'7	117'6	117'8	115'7	113'2	110'6	109'2	109'7	111'0	112'3
February -	114'4	115'2	115'9	114'0	112'4	109'6	107'1	106'9	107'4	108'4	109'2
March -	113'6	115'2	117'5	117'3	114'5	109'5	105'0	102'3	102'9	103'6	105'2
April -	115'4	117'9	117'6	115'7	112'2	106'1	102'3	101'0	101'7	103'9	106'6
May -	118'2	118'7	118'4	116'1	111'2	106'0	104'2	102'8	102'5	104'3	106'4
June -	117'7	119'0	118'9	116'6	112'4	107'8	104'1	101'6	102'1	103'4	105'6
July -	119'3	121'1	120'6	118'0	112'7	107'6	103'8	102'0	102'3	104'2	106'7
August -	119'8	122'2	122'7	119'3	112'4	106'8	101'4	98'4	99'4	102'7	105'7
September -	116'9	119'3	120'2	118'4	112'4	107'3	101'5	99'5	100'9	104'1	107'2
October -	113'9	116'4	118'8	117'9	114'5	109'5	105'1	104'1	104'5	106'2	107'6
November -	113'5	113'9	116'9	115'5	114'3	110'8	106'7	104'5	104'7	105'8	106'2
December -	112'1	113'3	114'7	116'0	115'1	111'4	109'8	107'1	105'7	107'2	107'7
1848 :											
January -	112'9	112'9	116'5	117'7	116'1	112'7	108'3	106'2	105'9	105'9	106'2
February -	119'6	119'1	122'8	124'9	123'1	119'9	116'2	113'1	111'2	110'9	111'5
March -	120'4	123'6	124'9	125'4	121'8	116'6	110'6	108'6	107'2	108'4	110'9
April -	121'1	123'1	123'6	122'7	118'3	114'1	110'7	108'0	107'9	109'0	111'1
May -	124'3	125'9	125'1	122'8	116'8	111'3	107'5	105'8	105'8	107'5	109'7
June -	123'8	125'7	125'6	123'8	118'9	112'6	108'5	106'6	105'7	107'7	110'4

DECLINATION: TABLE OF NORMALS.

lxv

TABLE LII.—continued.

GÖTTINGEN HOURS.												
11	12	13	14	15	16	17	18	19	20	21	22	23
TORONTO HOURS.												
5	6	7	8	9	10	11	12	13	14	15	16	17
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
112'9	114'1	114'3	114'9	115'9	116'2	116'4	115'4	115'2	114'2	114'4	114'4	115'3
111'9	112'1	112'2	113'1	114'5	115'4	114'5	114'4	113'8	113'7	114'1	114'4	114'9
109'2	111'0	112'1	112'7	112'8	113'7	114'5	114'8	114'7	114'1	114'1	114'8	115'2
107'4	109'2	111'2	112'0	112'7	113'9	114'2	114'7	114'8	115'5	114'8	115'3	115'5
107'7	109'9	111'2	111'5	112'2	113'6	114'6	114'9	113'3	114'1	113'0	113'0	112'8
106'3	109'5	111'3	111'2	112'3	112'7	114'1	114'6	113'8	112'6	111'6	111'6	113'7
106'9	109'9	111'1	112'4	112'8	113'6	114'2	115'4	115'0	114'4	114'3	112'1	114'1
107'2	110'1	110'3	111'3	112'4	114'4	113'8	112'7	114'3	115'2	112'4	113'8	112'1
111'7	110'2	112'4	111'6	111'9	111'4	113'7	112'1	112'1	112'7	114'2	114'5	115'3
110'3	111'2	112'6	112'9	113'9	115'2	113'7	114'8	114'2	113'5	113'9	113'6	114'2
109'9	110'4	111'4	113'4	114'2	114'3	114'2	113'9	114'0	111'9	112'6	113'8	113'9
110'7	112'4	113'2	114'1	115'4	115'7	115'4	115'2	114'8	113'7	114'1	114'3	115'1
112'3	113'0	113'6	114'0	115'2	115'6	115'1	115'0	114'2	114'1	115'0	114'8	115'0
109'2	110'4	111'6	112'1	111'7	112'8	112'4	112'4	111'7	112'1	111'9	112'8	113'1
105'2	106'7	108'6	109'6	110'4	111'1	112'0	112'0	111'8	112'0	111'5	112'7	112'4
106'6	109'7	109'7	110'4	111'4	111'6	111'8	111'6	111'7	111'4	111'3	112'6	112'8
106'4	109'3	110'4	110'6	110'2	110'1	109'9	110'0	111'2	111'0	110'5	110'8	113'4
105'6	108'1	109'4	109'8	109'1	109'8	110'0	111'4	111'3	110'0	109'7	110'3	112'5
106'7	109'4	110'5	110'0	109'1	110'1	111'0	111'0	111'5	111'0	111'4	111'4	112'0
105'7	108'3	110'2	109'9	109'8	111'0	110'7	111'2	110'8	111'8	111'8	112'5	113'7
107'2	109'8	110'4	109'6	109'7	111'5	111'0	111'0	111'9	112'0	111'7	112'2	112'4
107'6	108'1	108'4	109'3	110'4	110'7	110'6	110'9	111'7	112'5	113'1	113'4	113'0
106'2	107'8	110'1	110'3	111'9	112'0	113'1	114'2	111'8	111'0	112'0	112'8	112'4
107'7	109'0	111'0	111'1	111'6	112'8	113'3	112'7	112'4	112'1	112'7	112'6	112'8
106'2	107'4	108'9	109'3	111'3	111'6	112'2	112'2	113'3	111'9	111'8	112'4	112'2
111'5	111'9	112'8	111'0	116'1	116'5	118'7	118'1	118'2	118'6	117'0	117'8	117'0
110'9	113'0	114'1	113'4	114'5	115'4	117'5	117'6	119'0	118'4	119'7	119'7	119'6
111'1	112'9	113'8	115'2	116'9	115'8	116'7	116'4	116'8	117'8	118'4	118'3	118'0
109'7	113'1	114'6	114'6	115'0	115'5	115'9	115'5	116'3	116'7	117'1	116'5	117'8
110'4	113'9	115'5	116'7	116'5	116'0	115'6	116'1	116'7	116'2	115'4	115'9	117'5

GENERAL CONCLUSIONS.

In a communication made to the Royal Society on the 18th of March 1852, it was shown that the larger disturbances of the Declination, both at Toronto and at Hobarton, indicated, by the variation in their numbers and aggregate values in different years, the existence of a *periodical inequality*, of which the extreme and opposite phases were five years distant from each other, and the years 1843 and 1848 were respectively the epochs of minimum and maximum. The examination which had led to this conclusion comprehended the years from 1841 to 1848 inclusive, and was definite in respect to 1843 as the year of minimum; inasmuch as 1841, 1842, and 1843 showed a progressive *decrease* in the number and aggregate value of the larger disturbances in each year, whilst from 1843 to 1848 there was a progressive *increase* of both in successive years.

It was noticed in the same communication that the regular *diurnal* variations of each of the three magnetic observation-elements at Toronto and Hobarton, the Declination, the Horizontal Force, and the Vertical Force, and of each of the two derived elements, the Inclination and the Total Force, exhibited evidences of a corresponding periodical inequality in the amplitude or extent of the diurnal variation, the years 1843 and 1848 being also epochs respectively of minimum and maximum. The observation of one of the elements, the Declination, extending uninterruptedly at Hobarton over eleven entire years, or from 1841 to 1851 inclusive, distinctly marked 1843 as the year of maximum, as well as 1843 as the year of minimum.

This discovery of the existence of a periodical inequality, common to the magnetic disturbances of larger amount and to those more regular diurnal magnetic variations of which the sun has been long recognised as the primary cause, (inasmuch as they conform systematically to laws depending on solar time,) was regarded as affording presumptive evidence of the subsistence of a causal connection common to those two classes of phenomena; which presumption was corroborated by facts adduced in the same communication, proving that the disturbances are themselves subject, on the average, to a well-marked diurnal period regulated also by solar time.

The periodical inequality thus manifested, having its opposite phases of maximum and minimum separated by an interval of five years, and of which the cycle might therefore be conceived to include about ten of our solar years, did not appear to connect itself with any of those divisions of time with which we are conversant, as depending upon the relative circumstances of the sun, and the earth and her satellite. The cycle might or might not be one of regular and unfailing recurrence. The observational evidence to which we are indebted for a knowledge of its existence, though sufficiently decisive as far as the period of observation extended, could only be viewed, in reference to a permanently cyclical character of the phenomenon, as fragmentary, and as the commencement of an investigation which would require to be pursued in one or more of the permanent magnetic observatories established in our own and other countries.

Had no other circumstance presented itself to give additional interest to an investigation which held out at least a fair promise of making known laws of definite order and sequence in phenomena which have excited so much attention of late years, but of which so little has hitherto been ascertained,—had, for example, the decennial period, which appeared to prevail with precisely corresponding features in two distinct classes of the magnetic variations, connected itself with no other periodical variation either of a terrestrial or cosmical nature with which we are acquainted,—there might have been, indeed, little reason to apprehend, in these days of physical curiosity and inductive application, that the investigation would have been suffered to drop; but the interest and importance of the inquiry have doubtless been greatly enhanced by the remarkable coincidence, which it was the object of the paper communicated to the Royal Society in March 1852 to announce, between the above-described periodical inequality by which the magnetic variations referable to solar influence are affected, and the periodical inequality which has been discovered by M. Schwabe to exist in the frequency and magnitude of the solar spots. The coincidence, as far as we are yet able to discover, is absolute; the duration of the period is the same, and the epochs of maximum and minimum fall in both cases on the same years. The regularity with which the alternations of increase and decrease have been traced by M. Schwabe in his observations of the solar spots (which have been now continued for about thirty years), must be regarded as conferring a very high degree of probability on the systematic character of causes which as yet are known to us only by the visible appearances which they produce on the sun's disk, and by the disturbances which they occasion in the magnetic direction and force at the surface of our globe. As a discovery which promises to raise terrestrial magnetism to the dignity of a cosmical science, we may feel confident that, although the colonial observatories have been brought to a close, the investigations, which they have thus successfully commenced, will be pursued to their proper accomplishment in those national establishments which have a permanency suitable for such undertakings.

The conclusions which have been hitherto drawn, both in the Philosophical Transactions and in the introductory discussions in the Toronto and Hobarton volumes, regarding the periodical laws of the disturbances at those stations, have been confined exclusively to the disturbances of a single element, viz. the Declination. It was fully recognised that each of the other two observational elements, viz. the Horizontal and the Vertical Force, might be expected to furnish concurrent, but strictly independent, evidence of the periodical affections to which the magnetic disturbances are subject; but the work to be accomplished for the elaboration of that evidence was considerably greater than in the case of the Declination, from the necessity of eliminating the influence of changes of temperature on the magnets employed in measuring the variations of the Horizontal and Vertical Forces, before these disturbances could be separated for analysis. The labour required in the different processes of reduction has now been gone through, and statements of the results in full detail are contained in the

preceding pages of this volume: it now remains to bring together in one view the evidence which the three observational and the two derived elements furnish of the periodical laws—decennial, annual, and diurnal—which regulate the occurrence of the larger disturbances.

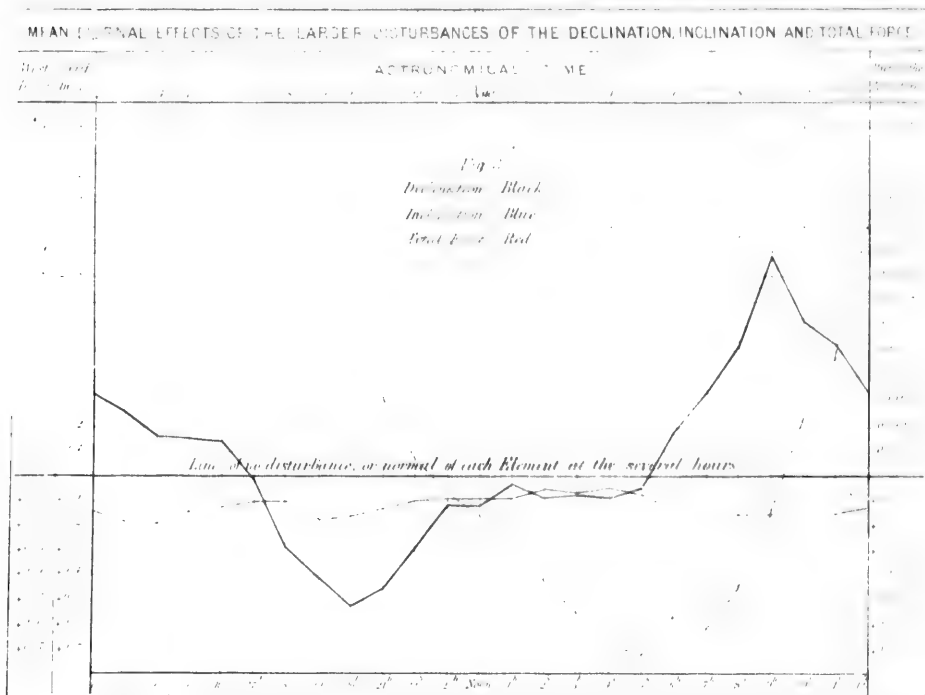
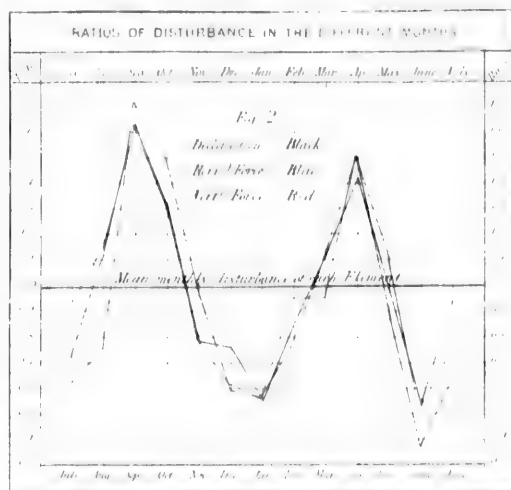
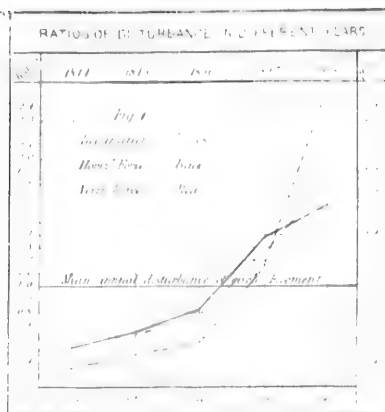
Decennial Period.—In respect to the decennial period, it must be regarded as a fortunate circumstance that the five years of hourly observation, which were commenced before the existence of any inequality of longer duration than a year was suspected, began with 1843, the year of minimum, and closed with 1848, the year of maximum disturbance, so that the variation has been followed through a complete phase. This has been strictly the case in the Declination and Horizontal Forces, and with a single exception in the Vertical Force also, the exception being caused by the interruption of the observations of that element, (for purposes explained elsewhere,) during the months of October, November, and December 1843, January and February 1844. These months have been supplied, in the year ending June 1844, from hourly observations made with the same apparatus in the preceding year, viz. in the months of October, November, and December 1842, January and February 1843, thus rendering the five years of the Vertical Force complete for the investigation of the *annual* and *diurnal* variations; but, of course, in regard to the *decennial* period the months taken from a different year, even though it be the adjacent one, are an imperfect substitute. The effect of this substitution has been in fact, as shown in p. xxix, to swell the aggregate value of the disturbances of the Vertical Force in the year nominally ending June 30, 1844, but really comprising five months taken from a preceding year, so as to make them slightly exceed the aggregate value in the year ending June 30, 1845. A similar slight excess in the aggregate value of the disturbances of the Horizontal Force in the year ending June 1844, over the aggregate value in the year ending June 1845, is shown (p. ix) when the same five months of the preceding year are substituted for its own months; but when, in the case of the Horizontal Force (the observations of which were not suspended, as were those of the Vertical Force), the actual observations throughout the year ending June 1844 are taken, the true progression is restored, and the apparent anomaly disappears.*

* When the disturbances are taken from the observations of the months actually belonging to the year ending June 1844, the aggregate values of the disturbed observations of the Horizontal Force in the different years are as follow:—

					Ratios.
Year ending June 30, 1844	-	-	6016'5	-	0'35
" " 1845	-	-	8032'4	-	0'47
" " 1846	-	-	9479'2	-	0'55
" " 1847	-	-	19700'1	-	1'14
" " 1848	-	-	42905'3	-	2'49
Total in the five years	-	-	86133'5	-	
Mean annual value	-	-	17226'7	-	= 1'00

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ILLUSTRATIONS OF THE MEAN EFFECTS OF THE LARGER DISTURBANCES



The variations of the three magnetic elements being measured by instruments wholly distinct and unconnected with each other, each element affords an independent evidence of the progressive increase in the aggregate values of the larger disturbances during the period under examination. The sum of the aggregate values of each element in the five years, divided by 5, gives the *mean* annual value of that element, which we may take in each case as equal to 1.00, for the purpose of comparison with the *actual* aggregate values in the different years. We have then the ratios of the disturbances of the different elements in the different years as follows:—

TABLE LIII.

		Declination.	Horizontal Force.	Vertical Force.	Mean.
Year ending June 30, 1844	-	0.52	0.35	0.65*	0.44
" " 1845	-	0.64	0.47	0.58	0.57
" " 1846	-	0.82	0.55	0.73	0.70
" " 1847	-	1.39	1.14	1.23	1.25
" " 1848	-	1.63	2.49	1.80	1.97

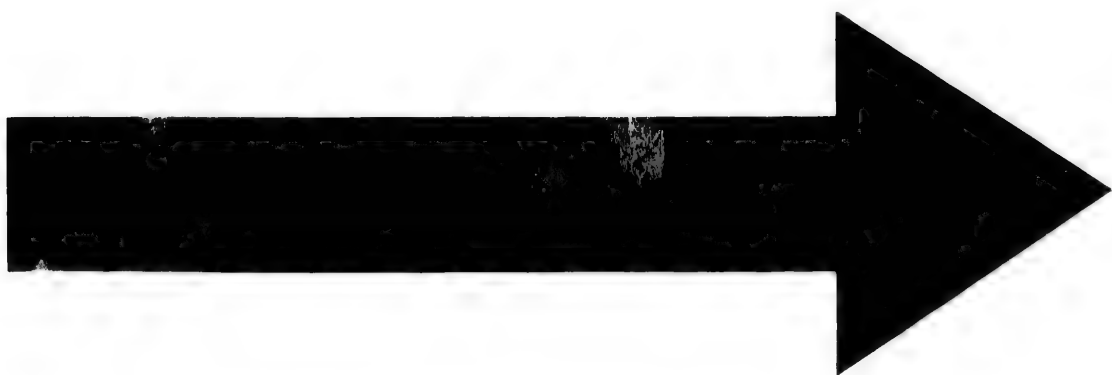
The final column has been added : *now* the mean ratio of disturbance in each year as derived from the three elements, measured by the aggregate value in each year of all the disturbances which exceeded a certain definite magnitude in each element, the same magnitude being taken throughout the five years.

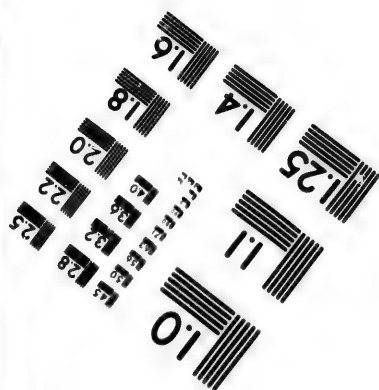
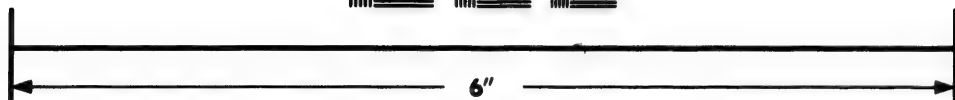
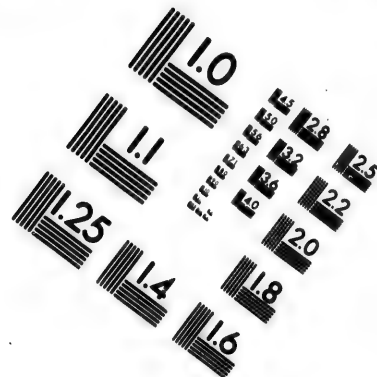
It is seen by this table that in the year ending June 1847 the ratio of disturbance is above twice as great, and in the year ending June 1848 nearly four times as great, as in either of the years ending June 1844 or June 1845. In the year ending June 1848, which is the year of maximum, the proportion is nearly five times as great as in the year ending June 1844, which is the year of minimum. The evidence of the existence of a decennial period borne by the disturbances of the Declination receives the fullest confirmation from the variations in different years of the disturbances of the Horizontal and Vertical Forces.

Fig. 1. pl. 1. has been drawn in illustration of the progressive increase of disturbance in each of the three elements between the year ending June 1844 and the year ending June 1848. The dotted horizontal line represents the *mean* or *average* annual disturbance in each element, and is the zero line, or unit, with which the *actual* aggregate values of the disturbance of each element in each year are compared: the Declination is represented by a black line, the Horizontal Force by a blue line, and the Vertical Force by a red line. The rate of increase of disturbance is seen to be much slower in the first half than in the second half of the five years.

Annual Period.—The sum of the aggregate values of the disturbances of each element in the five years, divided by 12, gives the *average monthly* disturbance-value

* In the deduction of this number, five months of the preceding year have been substituted for five months of the year ending June 1844; it has not been included, therefore, in the final column which shows the *mean* ratios in each year.





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for that element, which being taken as = 1·00, and compared with the *actual* monthly disturbance-values, gives the ratios in the following table:—

TABLE LIV.

Months.	Declination.	Horizontal Force.	Vertical Force.	Mean.
July . . .	0·94	0·61	0·71	0·75
August . . .	1·16	0·75	1·08	0·99
September . . .	1·62	1·71	1·61	1·64
October . . .	1·31	1·48	1·29	1·36
November . . .	0·78	0·98	0·75	0·84
December . . .	0·76	0·58	0·61	0·65
January . . .	0·57	0·56	0·57	0·57
February . . .	0·84	0·94	0·74	0·84
March . . .	1·11	0·94	1·08	1·04
April . . .	1·42	1·50	1·49	1·47
May . . .	0·98	0·90	1·12	1·00
June . . .	0·53	0·36	0·50	0·46

The evidence afforded by each of the three observational elements in regard to annual variation is to one and the same effect. January and June are the months of minimum disturbance, September and April the months of maximum disturbance. The aggregate value of the disturbances in the equinoctial months is about three times as great as in the solstitial months. Of the two equinoctial months the value is somewhat higher in each element in September than in April; and of the two solstitial months December is higher than June, also in each of the three elements.

Fig. 2. pl. 1. has been drawn in illustration of the annual variation which has been thus described. The dotted horizontal line is the *mean* monthly disturbance of each element (*i.e.* the sum of the disturbance in the twelve months, divided by 12). The black line for the Declination, the blue line for the Horizontal Force, and the red line for the Vertical Force, show in each case the variation in the proportion which the actual disturbances in each month bear to the *mean* monthly disturbance in the same element. The correspondence of the three elements could scarcely be more perfect.

The annual variation which has been thus deduced has reference exclusively to the variable amount in the different months of the sums of the aggregate values of the disturbances of each element, without distinguishing apart or separating the disturbances which cause easterly deflections and those which cause westerly deflections; or those which increase and those which decrease the Horizontal and Vertical Forces. When this separation is made, we continue to find that each of the two portions into which the disturbances of each element are divided, exhibits distinctly and notably the same general features which have been derived from their conjoint consideration. The equinoxes are in all cases the epochs of maxima and the solstices of minima. But when we study more carefully the relative prevalence of disturbances of particular

character at different periods of the year,—which we may do by forming tables of the relative proportion which the aggregate values in the different months of the easterly disturbances bear to the aggregate values in the same months of the westerly disturbances, and the disturbances which decrease the force bear to those which increase it,—we find that indications present themselves of an annual variation of a different kind from that which has been hitherto described, namely, an annual variation in the *character* of the disturbances of two at least of the elements which have been observed; and although a greater length of time and a greater amount or continuance of observation may be required for the satisfactory establishment of such a periodical variation, its present indications ought not to be overlooked, since the range of the variation is of considerable magnitude, and its systematic character as distinctly marked as could well be expected in an *annual* variation derived from not more than *five* years of repetition. The elements in which these phenomena are most distinctly noticeable are the Declination and the Vertical Force, and the correspondence between the indications of these two elements is in many respects very remarkable. In both elements, when the relative proportions are taken,—in the Declination, of the aggregate values in the different months of easterly and of westerly disturbances; and in the Vertical Force, of disturbances which decrease and disturbances which increase the force,—we find that in both cases the proportions vary from a minimum at the southern solstice to a maximum at the northern solstice, the equinoxes being intermediate. At the northern solstice easterly disturbances are in considerable excess, as are disturbances which decrease the Vertical Force; at the southern solstice, the excess is on the other side; westerly disturbances then predominate, as do the disturbances which increase the Vertical Force. The relative proportion of the aggregate values of easterly to westerly disturbances of the Declination, and of disturbances which decrease the Vertical Force to those which increase it, varies from the one solstice to the other, approximately, as three to one, and in both elements nearly alike.

In the Horizontal Force the disproportion between the values of the disturbances which increase the force and those which decrease it is so great (decreasing disturbances *greatly* preponderating at all periods of the year) that a variation corresponding to that of the two other elements is not so simply arrived at; but it may be stated generally that the proportion of decreasing disturbances is greater at the epoch of the southern solstice than at that of the northern solstice.

Diurnal Variation.—Before we proceed to examine the diurnal variation of the Declination, Inclination, and Total Force which it is the average effect of the larger disturbances to produce, it may be desirable to show the proportions in which the disturbances of the three *observed* elements occur at the different hours. This is expressed in the following table by the ratio which the aggregate values in the five years of the disturbances at each particular hour bear to the mean or average disturbance at all the hours in the same five years taken as the unit.

TABLE LV.

Toronto Astronomical Hours.	RATIOS.			Toronto Civil Hours.
	Declination.	Horizontal Force.	Vertical Force.	
18	1'05	1'00	1'21	6 a.m.
19	1'17	1'40	1'15	7 a.m.
20	1'27	1'20	0'80	8 a.m.
21	1'11	1'00	0'54	9 a.m.
22	0'87	1'00	0'36	10 a.m.
23	0'66	0'90	0'34	11 a.m.
0	0'49	0'87	0'46	Noon.
1	0'30	0'76	0'63	1 p.m.
2	0'40	0'66	0'77	2 p.m.
3	0'40	0'66	0'87	3 p.m.
4	0'53	0'61	1'04	4 p.m.
5	0'56	0'66	1'07	5 p.m.
6	0'84	0'59	1'01	6 p.m.
7	0'98	0'76	1'05	7 p.m.
8	1'22	0'75	0'89	8 p.m.
9	1'82	0'90	0'74	9 p.m.
10	1'55	1'03	0'85	10 p.m.
11	1'25	1'14	0'93	11 p.m.
12	1'35	1'22	1'39	Midnight.
13	1'52	1'58	1'58	1 a.m.
14	1'21	1'60	1'61	2 a.m.
15	1'13	1'37	1'73	3 a.m.
16	1'34	1'14	1'51	4 a.m.
17	1'05	1'02	1'41	5 a.m.

From the systematic increase and decrease of the ratios at the different hours, it is obvious that the disturbances of each element, when viewed on the average of a sufficient body of observations, are regulated by laws which have a diurnal period. The diurnal variation thus presented is far, however, from being identical in each of the three elements. The maximum disturbance takes place, indeed, in all the elements during the hours of the night, and the minimum disturbance during the hours of the day; but the particular hours of maximum and minimum are different in the three cases. The hour of maximum in the Declination, for example, is 9 p.m., when the disturbances of the Horizontal and Vertical Forces are both even *less than the hourly average*: and the Horizontal and Vertical Forces do not reach their hours of maximum until, respectively, 2 and 3 a.m., when the disturbances of the Declination have notably declined. So in respect to the hour of minimum: that of the Declination, 1 p.m., is nearly midway between that of the Vertical Force at 11 a.m. and that of the Horizontal Force at 4 p.m., the disturbance of the Horizontal Force being still high when that of the Vertical is a minimum, and the disturbance of the Vertical Force being still high when that of the Horizontal Force is a minimum. Speaking generally, the disturbances of the three elements are above the average in the hours of the night and early morning, and below the average during the hours of the day; to the latter, however, there is an exception in the Vertical Force, which is above the average from 4 to 7 p.m. In the Declination the aggregate value of the disturbances at the hour of

maximum is about six times as great as at the hour of minimum; in the Horizontal Force, about 2·7 as great; and in the Vertical Force, about five times as great.

In the ratios of the Declination-disturbances at the different hours shown in the preceding table we have the joint effects of two classes of disturbances, those which produce easterly and those which produce westerly deflections; and in the ratios of the disturbances of the Horizontal and Vertical Forces at the different hours, we have the further complication that the variations of the Horizontal and Vertical Forces do not bear a simple relation to those of the theoretical equivalents to which they are due,—viz. the Inclination and the Total Force,—but involve quantities dependent on the resolution of forces, which, when the Inclination is great, as it is at Toronto, have a tendency to mask the simplicity of the variations of the Inclination and of the Total Force, as they would appear if they were the subjects of direct observation. In the following table, therefore, are placed the proportions at the different hours in which the six classes of phenomena respectively vary, viz. the disturbances which produce easterly and those which produce westerly deflections, those which increase and those which decrease the Inclination, and those which increase and those which decrease the Total Force.

TABLE LVI.

Toronto		RATIOS OF DISTURBANCE.						Toronto	
Astronomical		Of the Declination producing		Of the Inclination producing		Of the Total Force producing		Civil	
Hours.		Easterly Deflection.	Westerly Deflection.	Increase of Inclination.	Decrease of Inclination.	Increase of Force.	Decrease of Force.	Hours.	
18		0'45	1'82	0'82	0'83	0'27	1'91	6 a.m.	
19		0'35	2'23	1'29	0'51	0'26	1'91	7 a.m.	
20		0'26	2'58	1'14	0'62	0'37	1'12	8 a.m.	
21		0'21	2'25	1'05	1'37	0'22	0'65	9 a.m.	
22		0'28	1'62	0'96	1'47	0'25	0'28	10 a.m.	
23		0'39	1'01	0'89	1'80	0'39	0'07	11 a.m.	
0		0'24	0'80	0'93	1'75	0'67	0'04	Noon.	
1		0'21	0'41	0'87	1'70	1'25	0'10	1 p.m.	
2		0'20	0'65	0'65	1'92	1'79	0'08	2 p.m.	
3		0'22	0'62	0'71	1'36	2'21	0'06	3 p.m.	
4		0'32	0'80	0'61	1'46	2'77	0'07	4 p.m.	
5		0'44	0'71	0'79	1'35	2'96	0'07	5 p.m.	
6		1'05	0'57	1'04	0'72	2'39	0'07	6 p.m.	
7		1'44	0'39	1'14	1'02	2'56	0'09	7 p.m.	
8		1'95	0'28	1'12	0'55	1'99	0'09	8 p.m.	
9		3'09	0'22	1'17	0'58	1'23	0'31	9 p.m.	
10		2'41	0'45	1'18	1'39	0'81	0'83	10 p.m.	
11		2'02	0'27	1'19	0'84	0'53	1'19	11 p.m.	
12		1'76	0'82	1'10	0'85	0'46	2'14	Midnight.	
13		1'79	1'19	1'32	0'70	0'26	2'57	1 a.m.	
14		1'37	1'00	1'33	0'37	0'22	2'70	2 a.m.	
15		1'28	0'94	1'05	0'48	0'28	2'81	3 a.m.	
16		1'18	1'21	0'90	0'48	0'18	2'48	4 a.m.	
17		0'91	1'23	0'76	0'55	0'28	2'24	5 a.m.	

We learn from this table that the laws which regulate the occurrence of easterly and westerly disturbances of the Declination are not on the one hand similar, nor on the other hand are they always complementary to each other. Thus from 1 P.M. to 5 P.M. both classes are considerably below the average, and from 1 A.M. to 5 A.M. both classes, with a slight exception, are above the average; whilst from 6 P.M. to 11 P.M. easterly disturbances greatly exceed, and westerly fall greatly short, of the average; and from 6 A.M. to 11 A.M. westerly exceed and easterly fall short of the average. In the Inclination and Total Force the complementary character of the opposite affections of each element is somewhat more extensively manifested: thus, the disturbances which increase the Inclination are below the average from about noon and the early hours after noon, when those which decrease it are above the average; and are below the average from about midnight and the early hours after midnight, when those which increase the same element are above the average. In the Total Force, from 1 A.M. to 8 A.M. the disturbances which increase the force are greatly above, as those which decrease the force are greatly below, the average,—a contrast which is reversed from 1 A.M. to 8 A.M., the disturbances which decrease the force being then greatly above, whilst those which increase it are greatly below, the average. In neither of the two elements, however, does the complementary character exclusively prevail. It may be remarked, that in all the instances which have been thus brought into view, treating successively the diurnal variations of the disturbances of each of the three elements, the parallel cases which have been cited, whether of identity or of contrast, fall, without exception, on homonymous hours—a circumstance which affords additional evidence of the systematic character of the affections of which we are treating.

There does not appear to be any uniform cotemporaneous connection between the prevalence of either easterly or westerly Declination-disturbance, and that of disturbances which either increase or decrease the Inclination or the Total Force. Thus, for example, the hours at which the disturbances which increase the Total Force are most notably above the average occur from 1 P.M. to 9 P.M.; whilst we find that for half that period, or from 1 P.M. to 5 P.M., the Declination-disturbances are characterised by a very low proportion of easterly disturbances, and for the other half of the period, or from 6 P.M. to 9 P.M., by a very high proportion of easterly disturbances; and, without multiplying instances of dissimilarity, it may be remarked generally, that the more the six classes of disturbance are examined and compared with each other, the less reason does there appear to conclude that there is any uniform interaccompaniment of the variations of different elements.

As the instrument by which the variations of the Declination are observed is more simple in construction than those required for the variations of the Inclination and Total Force, and the disturbances of the Declination are therefore more easily observed and more generally known, a somewhat disproportionate consideration has been frequently given to them in the discussion of these phenomena, which it may be

desirable briefly to remark upon. Thus the knowledge of the magnetic disturbances having been chiefly drawn hitherto from those of the Declination, it has been very generally and very naturally imagined that the early hours of the night, or from 8 P.M. to 11 P.M., are those at which magnetic disturbances principally take place; that about 11 P.M., or a little after, they begin to subside, disappearing almost wholly in the daytime, and reappearing again possibly the following evening, at the same hour as on the preceding evening, in supposed analogy with certain peculiar atmospheric disturbances, which manifest a tendency to recur at the same hours on successive days. It is in this supposed analogy that the term of magnetic *storms* appears to have originated. An examination of the observations of the three elements at but a single station, as Toronto for example, teaches us that this view requires to be considerably modified. The disturbances of the Declination, which reach a maximum at 9 P.M., have indeed already subsided considerably at 11 P.M., but those of the Inclination show no abatement until about 2 A.M., whilst those of the Total Force, which are *much below* their average at 9 P.M., increase progressively to their maximum, which is only reached at 3 A.M., or nearly six hours after the maximum of the Declination disturbances has taken place. In like manner the hours of the afternoon, in which the Declination is but little disturbed, and which have been supposed in consequence to be hours in which an intermission of disturbance takes place, are seen by the table to be precisely those hours at which the disturbances which increase the Total Force have their principal development, being then in the proportion of nearly ten to one when compared with the homonymous hours after midnight. When these remarkable phenomena are more fully studied, the aspect they present is that of a disturbance continued frequently through several successive days, changing from one element to another, and affecting each at different hours and in different modes, in conformity with laws the average operation of which it has been the object of this investigation to ascertain; and wearing the appearance consequently, when only a single element is regarded, of a limitation to those hours when that element in particular is affected, but which appearance ceases when the phenomena are more generally apprehended.

It was the supposed analogy between magnetical and atmospherical disturbances which led, in the commencement of the British colonial observatories, to the *simultaneous* observation and record of these two great and, as we have now reason to believe, distinct branches of natural phenomena; and as the inquiry advances we are continually becoming acquainted with additional circumstances to strengthen the persuasion, that the causes of these occasional and previously supposed "irregular" manifestations of disturbing magnetical influence are to be sought in more distant sources than in variations of the meteorological phenomena.

There is another misapprehension in regard to the nature of the occasional disturbances, which has followed very naturally from the limitation of the view to the disturbances of a single element. An inference has sometimes been drawn in favour of a *local origin* of a particular disturbance (in contradistinction to the general fact of

their simultaneous occurrence at extremely distant parts of the globe), from the circumstance that though the disturbance was manifested by the Declination at one station, no indication of it was shown by the cotemporaneous observations of the Declination at another and a distant station. Now, simultaneity at stations separated by considerable intervals of longitude implies a difference in the *solar* time; and the observations at Toronto show that a difference in the solar time may determine the question whether a disturbance, which may nevertheless be common to both stations, may or may not be traceable by simultaneous observations of a single element only. Towards the attainment of a just conclusion, therefore, in regard to a possible local origin, it is indispensable that a more extensive generalization should be made, and that cotemporaneous affections of the *three* elements should be brought into the comparison. Nor can this condition of the inquiry be dispensed with even in comparing the phenomena at stations under the same meridian, but separated by large intervals of latitude, unless it be first shown that the same law of solar hours prevails at both stations in regard to the occurrence of the disturbances of each particular element. It need scarcely be said that the general simultaneity of the disturbances has a very important bearing upon their theory, inasmuch as it militates decidedly against the supposition of their originating in atmospherical peculiarities, and tends to assign them, with far greater probability, to a cosmical source. That some disturbances may have a local origin is undoubtedly *possible*, but no such case has yet, I believe, been established on adequate evidence.

For the purpose of viewing in its simplest form, and expressed in numerical value, the influence which, on a daily average, the larger disturbances exercise on the Declination, Inclination, and Total Force, we must revert to the aggregate values in the five years which supplied the ratios of disturbance at the different hours in each of the six classes of phenomena contained in Table LVI. From these values we obtain readily and immediately for each hour the excess in the aggregate amount of easterly over westerly, or of westerly over easterly, deflection, and of disturbances which increase or decrease the Inclination or the Total Force over those which respectively decrease or increase those elements. Hence we can easily form a table containing, for each of the elements at every hour, the numerical *excess* in the aggregate values of whichever kind of disturbance predominates at that hour; and dividing the excess by 1550, which is the number of days of observation in the five years, we have the mean effect corresponding to the larger disturbances of each of the elements at the different hours, or the average diurnal variation of each element due to the larger disturbances. This is shown in the following table, illustrated by Fig. 3. pl. 1., in which the diurnal variations of Declination and Inclination are expressed in decimals of a minute of arc, and that of the Total Force in parts of the Total Force at Toronto, which in absolute value and employing British units may be taken with sufficient approximation at 13.9.

TABLE LVII.

Toronto Astronomical Time.	Mean Diurnal Variation occasioned by the larger Disturbances.			Toronto Civil Time.
	Declination.	Inclination.	Total Force.	
11.			Parts of the Total Force.	
18	0°29 W.	+0°10	—'000092	6 a.m.
19	0°41 W.	+0°18	—'000092	7 a.m.
20	0°52 W.	+0°16	—'000047	8 a.m.
21	0°46 W.	+0°13	—'000032	9 a.m.
22	0°30 W.	+0°10	—'000008	10 a.m.
23	0°11 W.	+0°09	+ '000007	11 a.m.
0	0°11 W.	+0°09	+ '000015	Noon.
1	0°03 W.	+0°09	+ '000027	1 p.m.
2	0°09 W.	+0°05	+ '000042	2 p.m.
3	0°08 W.	+0°07	+ '000054	3 p.m.
4	0°09 W.	+0°05	+ '000068	4 p.m.
5	0°04 W.	+0°08	+ '000073	5 p.m.
6	0°18 E.	+0°14	+ '000058	6 p.m.
7	0°34 E.	+0°14	+ '000062	7 p.m.
8	0°52 E.	+0°16	+ '000047	8 p.m.
9	0°87 E.	+0°16	+ '000016	9 p.m.
10	0°61 E.	+0°15	—'000022	10 p.m.
11	0°53 E.	+0°16	—'000047	11 p.m.
12	0°33 E.	+0°14	—'000098	Midnight.
13	0°26 E.	+0°18	—'000125	1 a.m.
14	0°17 E.	+0°19	—'000132	2 a.m.
15	0°16 E.	+0°14	—'000138	3 a.m.
16	0°15 E.	+0°12	—'000123	4 a.m.
17	0°02 W.	+0°10	—'000109	5 a.m.

From this table we find that the range of the diurnal variation of the Declination representing the influence of the larger disturbances is from 0°52 W. at 8 A.M. to 0°87 E. at 9 P.M. (or the whole range has an extent of 1°39); that of the Inclination, from a minimum increase of 0°05 at 2 P.M. to a maximum increase of 0°19 at 2 A.M. (or a total extent of 0°14); and that of the Total Force, from a maximum decrease of '000138 at 3 A.M. to a maximum increase of '000073 at 5 P.M. (or a total extent of range of '000211 parts of the Total Force at Toronto).

As the larger disturbances of each element which have been separated by the processes and subjected to the analysis described in this communication, can by no means be supposed to include the whole of the disturbances of the class to which they belong, we can only regard the extent of the diurnal variation as stated above to be in each case a minimum limit, which would be certainly somewhat exceeded if by any mode of proceeding we could succeed in separating the minor effects of the same causes; but we have no reason to suppose that the epochs of maxima and minima or the laws of intermediate progression would sustain any material alteration thereby.

As the aggregate values of the disturbances are taken from the five years which include a complete quinquennial or semi-decennial period, the *mean* diurnal variation

deduced from them must be considered as also subject to a small decennial variation, analogous to that which has been found to exist in the ordinary solar-diurnal variation. And as the sums of the variation-values at the different hours, taken with their proper signs, in no case equal zero, but have a sensible magnitude in each element, the absolute values of the three elements must also be affected with a very small cyclical variation due to the disturbances, of which the period will also be decennial.

LUNAR-DIURNAL VARIATION.

The observations employed in the investigation on which we now enter are the six years of hourly observations of the Declination from July 1st, 1842, to June 30th, 1848, and the five years of hourly observations of the Horizontal and Vertical Forces commencing July 1st, 1843, and ending June 30th, 1848, but having in the first year of the Horizontal and Vertical Forces the months of October, November, December 1842, January and February 1843, substituted for the same months in the subsequent year, during which the observations of the Vertical Force were suspended.

The larger disturbances of each element having been marked for omission, and the hourly normals (excluding the observations so marked) computed as already described, the retained observations were then characterised in reference to their lunar relation by small figures signifying the lunar hour to which each observation most nearly corresponded. For this purpose the time of the moon's meridian passage at Greenwich was taken from the Nautical Almanac, and corrected for the difference of longitude, so as to give the time of the moon's passage of the astronomical meridian at Toronto in the mean solar time of the station. The difference of time corresponding to the difference between the meridians of Toronto and Göttingen was then applied, so as to give the mean *Göttingen* time of the moon's passage of the astronomical meridian at Toronto. The observation at the Göttingen hour nearest to the time thus computed was then marked with 0", signifying that it was the nearest observation to the moon's upper culmination, and from which its distance could not exceed half an hour. The time of the moon's inferior passage was then computed in a similar manner, and the observation at the Göttingen hour nearest to it was marked 12". The intermediate hours received corresponding markings, except that when thirteen solar hours, and consequently thirteen observations, were comprised within twelve lunar hours, that observation was omitted which fell most nearly equidistant between the epochs of two exact lunar hours. The monthly tables were thus marked for the lunar hours before they were returned from myself to the office, and were considered to be prepared for re-arrangement in tables conforming to lunar time; but instead of the observations themselves, the *differences* at each hour between the scale readings observed and the normals at the same hour (Tables X., XXV., and

LII.) were entered in the lunar tables, by which process the diurnal and other variations depending on the period of the year and the hour of the solar day were, in great part at least, eliminated. The differences were marked with a + or - sign according as the scale reading at the time of observation was greater or less than the normal, the entries having a + sign implying in the case of the Declination a westerly deflection of the north end of the magnet, and those having a - sign implying the converse.

The means were then taken in every month, at every lunar hour, the signs being regarded; the monthly means were then collected into yearly means; and finally, the means at each lunar hour in the six years of observation were collected as shown in the subjoined table, in which the entries are expressed in scale divisions, one scale division equalling 0'721 of arc.

TABLE LVIII.

Lunar Hours.	Year ending June 30,						Means.	Lunar Hours.
	1843.	1844.	1845.	1846.	1847.	1848.		
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	H.
0	-0'20	-0'42	-0'45	-0'40	-0'46	-0'37	-0'38	0
1	-0'11	-0'31	-0'18	-0'37	-0'64	-0'29	-0'32	1
2	-0'08	-0'28	+0'04	-0'28	-0'39	-0'31	-0'22	2
3	-0'09	-0'08	-0'07	0'00	-0'36	-0'13	-0'12	3
4	+0'26	+0'09	+0'31	+0'08	+0'13	+0'28	+0'19	4
5	+0'39	+0'09	+0'42	+0'52	+0'20	+0'45	+0'35	5
6	+0'66	+0'40	+0'23	+0'77	+0'15	+0'48	+0'45	6
7	+0'51	+0'29	+0'47	+0'56	+0'31	+0'29	+0'40	7
8	+0'17	+0'26	+0'08	+0'50	+0'09	+0'10	+0'20	8
9	-0'14	+0'21	-0'31	+0'31	-0'23	+0'35	+0'03	9
10	-0'36	-0'24	-0'57	-0'22	-0'40	+0'04	-0'29	10
11	-0'51	-0'33	-0'66	-0'54	-0'24	-0'49	-0'46	11
12	-0'59	-0'48	-0'51	-0'51	-0'52	-0'22	-0'47	12
13	-0'37	-0'27	-0'45	-0'34	-0'29	-0'44	-0'36	13
14	-0'17	-0'31	-0'24	-0'32	+0'07	-0'15	-0'19	14
15	+0'07	-0'14	+0'04	-0'12	+0'52	-0'10	+0'04	15
16	+0'12	+0'22	+0'31	+0'14	+0'43	+0'20	+0'24	16
17	+0'37	+0'45	+0'51	+0'16	+0'55	+0'49	+0'42	17
18	+0'43	+0'74	+0'65	+0'39	+0'47	+0'58	+0'54	18
19	+0'26	+0'25	+0'52	+0'21	+0'55	+0'39	+0'36	19
20	+0'29	+0'13	+0'35	+0'20	+0'22	+0'05	+0'21	20
21	+0'08	+0'15	+0'10	-0'15	-0'21	-0'30	-0'06	21
22	-0'26	-0'05	-0'04	-0'23	-0'42	-0'42	-0'24	22
23	-0'29	-0'37	-0'33	-0'25	-0'31	-0'34	-0'32	23

Representing the mean of the six years by the usual formula of sines and cosines, we have the coefficients of the several terms as follows, expressed in seconds of arc, α being counted in hours (multiplied by 15°) from the time of the moon's upper culmination.

TABLE LIX.

Arguments.	Constant.	$\cos a$.	$\sin a$.	$\cos 2a$.	$\sin 2a$.	$\cos 3a$.	$\sin 3a$.	$\cos 4a$.	$\sin 4a$.	$\cos 5a$.	$\sin 5a$.	$\cos 6a$.
Coefficients	$A_0 =$	$A_1 =$	$B_1 =$	$A_2 =$	$B_2 =$	$A_3 =$	$B_3 =$	$A_4 =$	$B_4 =$	$A_5 =$	$B_5 =$	$A_6 =$
	"	"	"	"	"	"	"	"	"	"	"	"
	0'0	+0'20	-1'03	-19'18	+0'45	+1'84	-0'32	+1'21	+0'59	+0'61	-0'48	-0'22
Arguments.	$\sin 6a$.	$\cos 7a$.	$\sin 7a$.	$\cos 8a$.	$\sin 8a$.	$\cos 9a$.	$\sin 9a$.	$\cos 10a$.	$\sin 10a$.	$\cos 11a$.	$\sin 11a$.	$\sin 12a$.
Coefficients	$B_6 =$	$A_7 =$	$B_7 =$	$A_8 =$	$B_8 =$	$A_9 =$	$B_9 =$	$A_{10} =$	$B_{10} =$	$A_{11} =$	$B_{11} =$	$A_{12} =$
	"	"	"	"	"	"	"	"	"	"	"	"
	+0'57	-0'56	+0'08	+0'16	-0'03	-0'91	-0'39	-0'50	-0'42	+0'49	+0'28	-0'29

The coefficient of principal magnitude is $A_2 = -19''.18$, whose argument is $\cos 2a$. The same coefficient calculated for the different years is as follows:—

TABLE LX.

Year ending June 30th, 1843	.	.	.	-19'35
" " 1844	.	.	.	-17'61
" " 1845	.	.	.	-21'05
" " 1846	.	.	.	-20'22
" " 1847	.	.	.	-19'04
" " 1848	.	.	.	-18'53
And from the mean of the six years	.	.	.	-19'18

Whence we obtain the probable error of -19.18 (the value of A_2 from the mean of the six years) $= \pm 0''.34$.

With the two first terms of this formula, viz.—

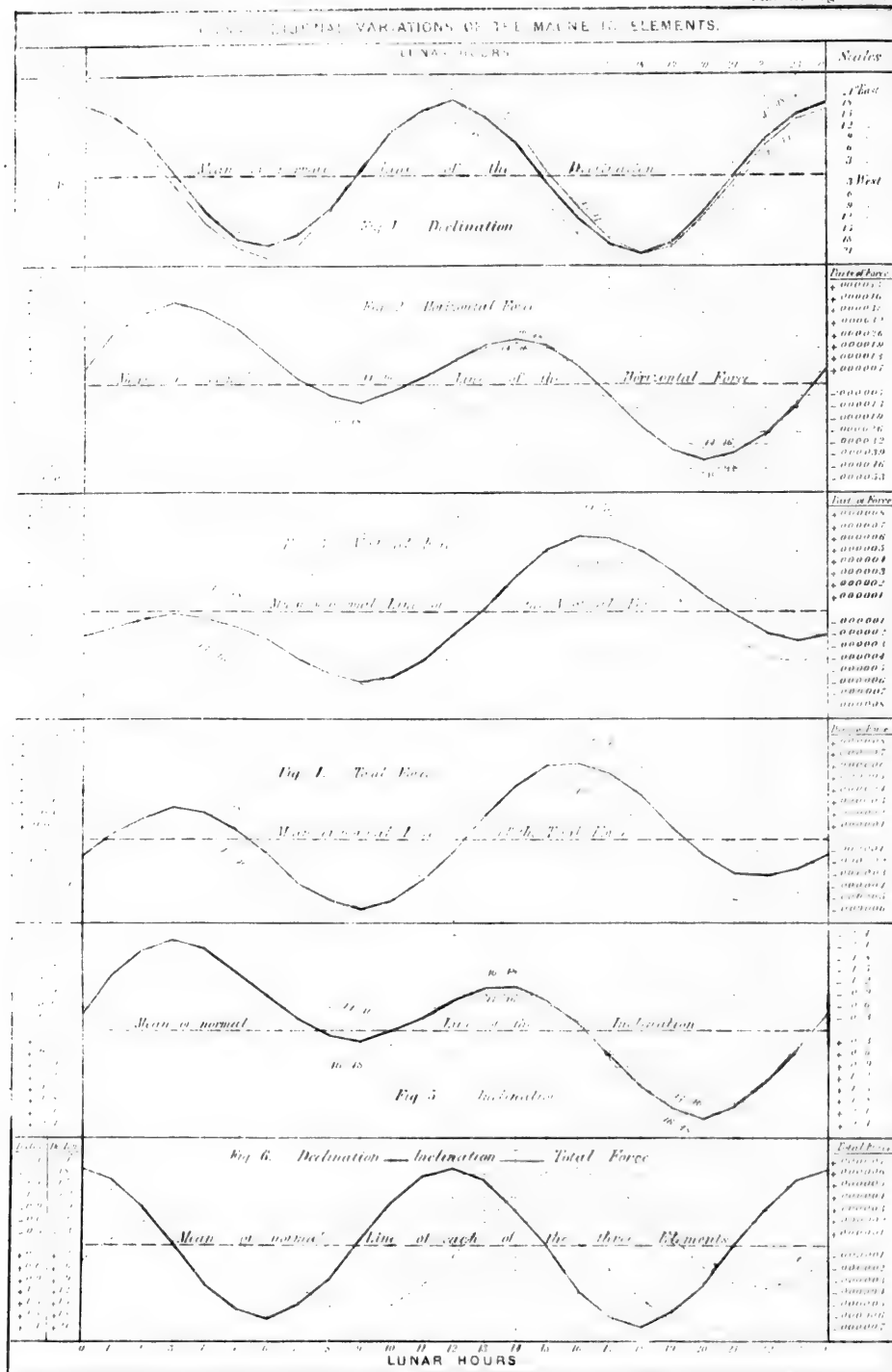
$$\Delta_x = 0''.0 + 0''.20 \cos a - 1''.03 \sin a - 19''.18 \cos 2a + 0''.45 \sin 2a$$

or its more convenient equivalent,

$$\Delta_x = 0''.0 - 1''.05 \sin (a + 348^\circ 52') + 19''.186 \sin (2a + 271^\circ 21')$$

we obtain the deflections of the north end of the magnet at the several lunar hours as follows:—

$5 a.$	$\cos 6 a.$
$=$	$\Lambda_6 =$
48	$-0^{\circ}22$
$1 a.$	$\sin 12 a.$
$=$	$\Lambda_{12} =$
28	$-0^{\circ}29$



LUNAR-DIURNAL VARIATION: HORIZONTAL FORCE.

LXXXI

TABLE LXI.

Lunar Hours.	Deflections.	Lunar Hours.	Deflections.	Lunar Hours.	Deflections.	Lunar Hours.	Deflections.
	"		"		"		"
22	9°29 to the East.	4	9°19 to the West.	10	10°67 to the East.	16	10°77 to the West.
23	15°92 "	5	15°89 "	11	17°30 "	17	17°78 "
0	18°95 "	6	18°14 "	12	19°38 "	18	20°21 "
1	16°46 "	7	15°34 "	13	16°31 "	19	17°43 "
2	9°54 "	8	8°20 "	14	8°86 "	20	10°19 "
3	0°14 "	9	0°42 to the East.	15	1°04 to the West.	21	0°42 "

Comparing these values with the actual deflections, we find the probable error at each observation hour $\pm 1''\cdot37$.

In Plate II., Fig. 1., the darker line represents the deflections in Table LXI. constituting the lunar-diurnal variation, the dotted line showing the mean or normal position of the magnet. The variation thus represented is that derived from the mean of the six years; and for the purpose of showing the accordance of the results when the whole period of six years is divided into three portions, each consisting of two years, —viz., July 1842 to June 1844, July 1844 to June 1846, and July 1846 to June 1848, —the corresponding curves have been computed by the subjoined formulæ, obtained as already described, and are represented by the fainter lines. The formulæ are—

July 1842 to June 1844, $\Delta_s = +0''\cdot41 - 2''\cdot09 \sin(a + 291^\circ) - 18''\cdot1 \sin(2a + 87^\circ\cdot7)$

July 1844 to June 1846, $\Delta_s = +0''\cdot30 + 3''\cdot04 \sin(a + 78^\circ\cdot7) + 20''\cdot6 \sin(2a + 270^\circ\cdot1)$

July 1846 to June 1848, $\Delta_s = -0''\cdot58 - 5''\cdot23 \sin(a + 53^\circ\cdot5) + 18''\cdot9 \sin(2a + 276^\circ\cdot1)$

The number of hourly observations of the Declination made in the six years amounted to 42,888; of these, 2,345 were disturbed to an amount which equalled or exceeded $5'\cdot0$ of arc from the normal at the same hour, and were consequently excluded; leaving 40,543 as the number of observations from which the results of the lunar-diurnal variation have been derived.

Horizontal Force.—Table LXII. exhibits, in columns 2 to 6, the mean hourly variation of the Horizontal Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean of the five years. The lunar influence at the several lunar hours is shown in decimals of a scale division, one such division being approximately $\cdot000087$ parts of the whole Horizontal Force at Toronto. The sign + implies that the force is increased, and — that it is decreased, by the lunar influence.

TABLE LXII.

Lunar Hours.	In the Year ending June 30,					Mean of the Five Years.	Lunar Hours.
	1844.	1845.	1846.	1847.	1848.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	+0'44	-0'05	+0'10	+0'70	-0'07	+0'22	0
1	+0'48	+0'01	+0'09	+0'70	+0'68	+0'39	1
2	+0'68	+0'59	+0'11	+0'29	+0'42	+0'42	2
3	+0'42	+0'48	+0'71	+0'50	+0'08	+0'44	3
4	+0'58	+0'28	+0'22	+0'09	+0'19	+0'27	4
5	+0'16	+0'68	+0'21	+0'43	+0'74	+0'44	5
6	-0'23	+1'11	-0'03	+0'09	+0'43	+0'27	6
7	-0'13	+0'72	-0'20	-0'25	+0'21	+0'07	7
8	-0'16	+0'59	-0'31	-0'24	-0'19	-0'06	8
9	-0'12	+0'28	-0'23	-0'79	+0'24	-0'12	9
10	-0'43	+0'20	-0'10	-0'62	+0'23	-0'14	10
11	-0'02	+0'32	+0'36	+0'39	-0'22	+0'17	11
12	-0'28	+0'37	+0'15	-0'05	-0'31	-0'02	12
13	+0'11	+0'64	+0'11	+0'23	+0'47	+0'31	13
14	+0'06	+0'84	+0'18	-0'09	+0'40	+0'28	14
15	+0'06	+0'04	+0'23	-0'06	+0'73	+0'20	15
16	0'00	-0'01	+0'13	+0'32	+0'28	+0'14	16
17	-0'17	+0'48	-0'47	0'00	+0'33	+0'03	17
18	-0'08	-0'19	-0'13	-0'24	-0'47	-0'22	18
19	-0'21	-0'13	-0'33	-0'54	-0'80	-0'40	19
20	-0'19	-0'70	-0'11	-0'55	-1'33	-0'58	20
21	-0'19	-0'82	-0'31	-0'09	-1'07	-0'50	21
22	-0'28	-0'44	-0'22	+0'09	-0'65	-0'30	22
23	-0'08	-0'46	-0'15	+0'34	-0'18	-0'11	23

We may represent the values in column 7 of Table LXII. (or the variation of the Horizontal Force at the several lunar hours on the average of the five years of observation) by the first terms of the usual formulæ for periodical functions; viz.,

$$\Delta_x = A_0 + A_1 \cos a + B_1 \sin a + A_2 \cos 2a + B_2 \sin 2a;$$

and by substituting in this formula the numerical values of the coefficients obtained from the numbers in column 7, it becomes

$$\Delta_x = +.05 - .024 \cos a + .214 \sin a + .0775 \cos 2a + .323 \sin 2a,$$

or its more convenient equivalent,

$$\Delta_x = +.05 + .215 \sin (a + 353^\circ.6) + .3324 \sin (2a + 13^\circ.5),$$

the coefficients being decimals of a scale division, and a reckoned in hours (multiplied by 15°) from the time of the moon's superior culmination. By this formula we obtain the curve which is shown by the stronger line in Plate II., Fig. 2.; and for the purpose of showing the degree of confidence to which this curve is entitled as an approximate representation of the variation produced in the Horizontal Force by the moon in the course of a lunar day, the variation in the different years in columns 2 to 6 of Table LXII. have been so combined as to form two separate means, one representing the columns headed 1844, 1845, and 1846, and a second representing

the columns headed 1846, 1847, and 1848,—the years 1844 and 1845 having double weight assigned to them in the first mean, and those in the columns headed 1847 and 1848 double weight in the second mean. The formulæ representing these separate means are—

For 1844 to 1846, $\Delta_s = +0.088 + 0.243 \sin(a + 347^\circ.6) + 0.277 \sin(2a + 4^\circ.6)$

For 1846 to 1848, $\Delta_s = +0.013 + 0.192 \sin(a + 355^\circ.0) + 0.395 \sin(2a + 19^\circ.2)$

The curves respectively computed by these formulæ are shown by the fainter lines in Fig. 2, in which the stronger line has been already noticed as being derived from the mean of the five years.

The number of hourly observations of the Bifilar Magnetometer employed in this investigation is 34,303.

Vertical Force.—Table LXIII. exhibits, in columns 2 to 6, the mean hourly variation of the Vertical Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean variation in the five years. The lunar influence at the several lunar hours is expressed in decimals of a scale division, one scale division being approximately 0.00065 parts of the whole Vertical Force at Toronto. The sign + implies an increase, and — a decrease, of the force from the lunar influence.

TABLE LXIII.

Lunar Hours.	In the Year ending June 30,					Mean of the	Lunar Hours.
	1844.	1845.	1846.	1847.	1848.	Five Years.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0	Sc. Div. +0.08	Sc. Div. +0.02	Sc. Div. -0.02	Sc. Div. -0.03	Sc. Div. +0.03	Sc. Div. +0.02	0
1	+0.09	-0.03	+0.06	0.00	+0.02	+0.03	1
2	+0.02	-0.07	-0.16	-0.09	-0.18	-0.10	2
3	-0.11	0.00	-0.07	+0.18	-0.06	-0.01	3
4	-0.09	-0.01	-0.01	+0.13	+0.08	+0.02	4
5	+0.01	-0.02	-0.09	+0.07	+0.02	0.00	5
6	-0.12	-0.12	+0.09	+0.01	-0.05	-0.04	6
7	-0.06	-0.24	+0.08	-0.18	-0.02	-0.08	7
8	+0.03	-0.22	+0.03	-0.15	-0.17	-0.10	8
9	-0.04	-0.10	-0.10	+0.02	-0.07	-0.06	9
10	-0.13	-0.10	-0.10	+0.08	-0.11	-0.07	10
11	-0.14	+0.03	-0.03	+0.02	-0.14	-0.05	11
12	-0.08	+0.12	-0.10	+0.01	-0.20	-0.05	12
13	+0.14	+0.03	+0.08	+0.10	-0.16	+0.04	13
14	+0.03	+0.10	+0.04	+0.03	-0.09	+0.02	14
15	+0.08	+0.15	+0.06	+0.02	+0.04	+0.07	15
16	+0.11	+0.18	+0.08	+0.12	+0.06	+0.11	16
17	+0.17	+0.09	+0.04	+0.04	+0.12	+0.09	17
18	+0.19	+0.09	+0.18	-0.03	+0.02	+0.09	18
19	+0.11	+0.05	0.00	0.00	+0.12	+0.06	19
20	+0.14	+0.01	+0.01	-0.14	+0.08	+0.02	20
21	+0.11	-0.07	-0.17	-0.13	+0.05	-0.04	21
22	+0.08	+0.04	-0.21	-0.07	+0.07	-0.02	22
23	+0.11	+0.04	-0.18	-0.13	-0.03	-0.06	23

The curves obtained from the values comprised in this table are represented to the eye in Plate II., Fig. 3., the fainter lines corresponding to the variations in the separate periods, 1844 to 1846, and 1846 to 1848, and the stronger line to the mean of the whole period of five years. The formulæ by which these curves have been computed are as follow:—

$$\begin{aligned} 1844 \text{ to } 1846, \Delta_z &= + \cdot 006 - \cdot 092 \sin (a + 0^\circ \cdot 5) + \cdot 036 \sin (2a + 345^\circ \cdot 1) \\ 1846 \text{ to } 1848, \Delta_z &= - \cdot 014 - \cdot 028 \sin (a + 355^\circ \cdot 5) + \cdot 058 \sin (2a + 316^\circ \cdot 7) \\ 1844 \text{ to } 1848, \Delta_z &= + \cdot 005 - \cdot 058 \sin (a + 2^\circ \cdot 0) + \cdot 048 \sin (2a + 330^\circ \cdot 0) \end{aligned}$$

The coefficients are decimals of a scale division, and a is reckoned in hours (multiplied by 15°) from the time of the moon's superior culmination. The number of hourly observations of the Vertical Force Magnetometer employed in this investigation is 31,773.

Inclination and Total Force.—The variations of the Inclination and Total Force in a lunar day are derived from those of the horizontal and vertical components of the force by the formulæ—

$$\Delta \theta = \sin \theta \cos \theta \left(\frac{\Delta Y}{Y} - \frac{\Delta X}{X} \right);$$

$$\frac{\Delta \phi}{\phi} = \cos^2 \theta \frac{\Delta X}{X} + \sin^2 \theta \frac{\Delta Y}{Y};$$

in which θ is the inclination, ϕ the total force, X its horizontal, and Y its vertical component. They are shown for the whole period of the five years in Table LXIV., computed from the values of the Horizontal and Vertical Forces in columns 7 of Tables LXII. and LXIII. The variation of the Inclination is expressed in seconds of arc, the sign + signifying an increase of the dip of the north end of the magnet; and that of the Total Force in parts of the Total Force at Toronto, of which the approximate *absolute value* is 13·9 in British units.

TABLE LXIV.

Lunar Hours.	Lunar-diurnal Variation		Lunar Hours.	Lunar-diurnal Variation		Lunar Hours.	Lunar-diurnal Variation	
	of the Inclination.	of the Total Force.		of the Inclination.	of the Total Force.		of the Inclination.	of the Total Force.
0	−0·56	−'0000013	8	+0·05	−'0000051	16	−0·22	+·0000063
1	−1·44	+·0000004	9	+0·17	−'0000058	17	+0·57	+·0000053
2	−2·07	+·0000019	10	0·00	−'0000050	18	+1·31	+·0000033
3	−2·26	+·0000026	11	−0·32	−'0000034	19	+1·92	+·0000006
4	−2·05	+·0000021	12	−0·75	−'0000010	20	+2·14	−'0·000020
5	−1·61	+·0000008	13	−1·07	+·0000021	21	+1·93	−'0000031
6	−0·97	−'0000012	14	−1·08	+·0000044	22	+1·33	−'0000035
7	−0·33	−'0000034	15	−0·76	+·0000060	23	+0·42	−'0000026

These variations are represented to the eye by the stronger lines in Figs. 4. and 5. of Plate II.; in which also the fainter lines show the variations derived respectively from the half periods constituted as previously described. In Fig. 6., of Plate II. are collected in one view the lunar-diurnal variations of the Declination, Inclination, and Total Force, as they are separately represented in other figures of the same plate.

General Conclusions.—The three magnetic elements concur in showing that the moon exercises a sensible magnetic influence at the surface of the earth, producing in every lunar day a variation in each of the three elements, which is distinctly appreciable by the instruments employed in the observatories established to carry out the system of observation recommended by the Royal Society, when due care has been taken in conducting the observations, and suitable methods are adopted for elaborating the results.

The lunar-diurnal variation consists in a double progression in each lunar day in each of the three elements: the Declination has two easterly and two westerly maxima, and the Inclination and Total Force each two maxima and two minima in each interval between two successive passages of the moon over the astronomical meridian; the variation passing in every case four times through zero in the course of the lunar day. The easterly maxima of the horizontal deflection of the north end of the magnet synchronise with the moon's superior and inferior passages of the meridian, the westerly maxima with the lunar hours of 6 and 18. The maxima of the increased magnetic force due to the moon's action occur about the lunar hours of 3 and 16, and the minima about the hours of 9 and 20. The maxima of the Inclination, *i.e.* of the dip of the north end of the magnet, occur about the lunar hours of 3 and 14, and the minima about 9 and 20. The extent of the variation in the lunar day, or the range between the extremes that are widest apart, is in the Declination $38''\cdot33$, in the Inclination $4''\cdot4$, and in the Total Force $\cdot000012$ parts of the whole terrestrial magnetic force at Toronto. These are the values derived from the whole period of observation, *i.e.* from six years of the Declination, and from five years of the Inclination and Total Force. When the whole period is subdivided into two half-periods, the hours of maxima and minima and the extent of the range accord with the results of the whole period in each of the three elements, with slight and wholly insignificant exceptions. The reality of the variations is thus attested no less by the accordance of the results when the whole period during which the phenomena were observed is subdivided into separate and independent portions, than by the systematic character which the variation is seen to possess, when the strictly independent results at the several lunar hours are brought together and exhibited continuously.

As it happens that in the Declination the variation resulting from the moon's action is greater, relatively to the instrumental means for measuring it, than either in the Inclination or in the Total Force, it is reasonable to conclude that we have a better

opportunity of judging of the particular nature and character of the moon's magnetic influence by studying the effects produced on the Declination than by studying those produced on either of the other elements.

Referring to Table LIX., p. lxxx, which exhibits the coefficients of all the twelve terms in the formula of sines and cosines by which the results of observation are strictly represented, we perceive that the coefficient of the cosine of twice the hour angle is not only the one of greatest amount, but is, in fact, the only one which we can with confidence regard as possessing a substantial value. All the other coefficients are, without exception, not only extremely small in comparison with the one above noticed, but are so small that they may well be supposed to represent the small deviations from a natural law ascribable to errors which cannot wholly be extinguished in averages derived from not more than six years of observation. On the other hand, the coefficient in the second term has a value far beyond any explanation resting on the supposition of errors of observation. The probable error of any single hour is $1''.37$, whilst the range of the variation is not less than $38''$. Whilst, therefore, the general result of this investigation is to establish conclusively the existence of a lunar-magnetic influence sensible at the surface of the earth, the lunar-diurnal variation which is thus manifested appears to be consistent with the hypothesis that the moon's magnetism may be, in great part at least, if not wholly, derived by induction from the magnetism of the earth.

It is further observable, that in the lunar-diurnal variation there is no appearance of the *decennial* period which constitutes so marked a feature in the solar-diurnal variations.

SOLAR-DIURNAL VARIATION.

Declination.—In the first volume of the Toronto Observations, published in 1845, an inference was drawn from the examination of the observations in 1841 and 1842 printed in that volume, that the *double progression* which showed itself in the diurnal variation, (produced by a small westerly retrogression of the north end of the magnet occurring between the hours of 10 and 14), might be an effect of the superposition of two distinct diurnal variations, each proceeding from a distinct class of phenomena; one class being the regular solar-diurnal variation corresponding to the sun's daily (apparent) revolution round the earth; and the other class produced by causes, not indeed of daily, but of *occasional* occurrence, the diurnal variation being in the latter case the representative of the *mean* effect of the occasional causes; and it was suggested, that if by any process the whole effect of the occasional disturbances could be eliminated, it might be very possible that the residual variation, or that portion which might be regarded as more strictly deserving the name of "diurnal variation," might prove to be "a single progression with but one maximum and one minimum in the 24 hours." It was at the same time further suggested, that though it might be

difficult, and perhaps impossible, to eliminate from the observations the whole effect of the disturbances referred to, it might be very possible, by a partial separation of those of largest amount, to examine whether their influence on the diurnal variation was or was not of a systematic character, and such as might produce the supposed effects.

The Toronto observations from 1843 to 1848 have since been received and printed, and have been treated according to the suggestion above noticed. The result has been to establish the fact, that the occasional and previously called "irregular" disturbances are phenomena subject to periodical laws; and that amongst these there is one which regulates their occurrence in the diurnal period, causing them to constitute in their *mean* effect a diurnal variation wholly distinct from the regular *daily* solar-diurnal variation, and having different hours of maxima and minima. (*Phil. Trans.* 1851, Art. V.; 1852, Art. VIII.; 1856, Art. XV.; and pp. lxxvi and lxxvii of this volume.)

The disturbed observations which have been separated from the great body of the observations for the purpose of this investigation are all those which differ from the normal position of the magnet, at the same hour and in the same month, by a quantity equalling or exceeding $5^{\circ}0'$ of arc. These have sufficed to establish the systematic characters and distinctive features of the diurnal variation which the disturbances occasion, but we are sure that they do not give its *full numerical amount*; for it cannot be doubted that there must be minor disturbances of the same class,—minor effects proceeding from the same causes,—which remain in the body of the observations when those of $5^{\circ}0'$ and upwards have been removed; and which must still continue to exercise an influence similar in kind, and possibly (as being more numerous) not less in degree, on the residual diurnal curve, modifying the pure result which would be obtained if the whole influence of the disturbances could by any process be separated. The question, then, which now remains to be considered is, whether, and with what degree of probability, we may infer, by means of a comparison of the diurnal variation with and without the disturbances of $5^{\circ}0'$ and upwards, that if their whole influence were eliminated the residual diurnal variation would show itself as a single instead of a double progression.

This question is of some theoretical importance; for since the publication of the first volume of this work, in 1845, the physical explanation of the diurnal variation has occupied the attention of eminent physicists, two of whom in particular, Faraday and Secchi, have propounded physical theories, which, however dissimilar they may be in other respects, concur in regarding the diurnal variation derived from the whole of the observations including the disturbances, as phenomena of one and the same class, and the double progression as an integral part of the same, and a necessary consequence of the physical theory adopted for their explanation. An additional importance is therefore given to the inquiry whether, after the deduction of that portion of the diurnal variation which has now been ascertained to proceed from a distinct class of

phenomena, not of daily but of occasional occurrence, the residual variation, or that due to the regular daily course of the sun round the earth, may not be regarded with greater probability as a "single progression with but one maximum and one minimum," rather than as a "double progression with two maxima and two minima."

In column 2 of the subjoined table (Table LXV.) is shown the mean diurnal variation derived from the whole of the observations, including the disturbances; in column 3 the mean diurnal variation derived from the disturbances which equal or exceed 5'.0 (from Table LI., p. lxi); in column 4 we have the residual diurnal variation when the values in column 3 are deducted from those in column 2; and in column 5 we have the diurnal variation such as it would be found if we permitted ourselves to suppose that by abstracting the disturbances equalling or exceeding 5'.0 we had eliminated *half* the influence of the disturbances of the class to which they belong.

TABLE LXV.

Toronto Astronomical Time.	Diurnal Variation, as derived from				Toronto Astronomical Time.
	the whole of the Observations.	the larger Disturbances.	the Values in Column 2 — the Values in Column 3.	the Values in Column 2 — twice the Values in Column 3.	
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
h.					h.
12	0'96 E.	0'33 E.	0'63 E.	0'30 E.	12
13	0'80 E.	0'26 E.	0'54 E.	0'28 E.	13
14	0'69 E.	0'17 E.	0'52 E.	0'35 E.	14
15	0'87 E.	0'16 E.	0'71 E.	0'55 E.	15
16	1'27 E.	0'15 E.	1'12 E.	0'97 E.	16
17	1'91 E.	0'02 W.	1'93 E.	1'95 E.	17
18	2'69 E.	0'29 W.	2'98 E.	3'27 E.	18
19	3'58 E.	0'41 W.	3'99 E.	4'40 E.	19
20	3'92 E.	0'52 W.	4'44 E.	4'96 E.	20
21	3'17 E.	0'46 W.	3'63 E.	4'09 E.	21
22	0'94 E.	0'30 W.	1'24 E.	1'54 E.	22
23	1'80 W.	0'11 W.	1'69 W.	1'58 W.	23
0	4'13 W.	0'11 W.	4'02 W.	3'91 W.	0
1	5'10 W.	0'03 W.	5'07 W.	5'04 W.	1
2	4'96 W.	0'09 W.	4'87 W.	4'78 W.	2
3	3'91 W.	0'08 W.	3'83 W.	3'75 W.	3
4	2'37 W.	0'09 W.	2'48 W.	2'39 W.	4
5	1'33 W.	0'04 W.	1'29 W.	1'25 W.	5
6	0'30 W.	0'18 E.	0'48 W.	0'66 W.	6
7	0'22 E.	0'34 E.	0'12 W.	0'46 W.	7
8	0'70 E.	0'52 E.	0'18 E.	0'34 W.	8
9	1'39 E.	0'87 E.	0'52 E.	0'35 W.	9
10	1'31 E.	0'61 E.	0'70 E.	0'09 E.	10
11	1'21 E.	0'53 E.	0'71 E.	0'18 E.	11

From this table we perceive, 1st, that when the diurnal variation is derived from the whole body of the observations including the disturbances as in column 2, the march of the north end of the magnet towards the east, which is otherwise continuous from

the extreme westerly direction between 1 and 2 P.M. to the extreme easterly direction between 7 and 8 the following morning, is interrupted by a small westerly retrogression between 9 P.M. and 4 A.M.; 2d, that when the *larger* disturbances, or those which equal or exceed $5'0$ in amount, and produce as their *mean* effect the diurnal variation in column 3, are eliminated, the westerly retrogression previously noticed is reduced very considerably both in amount and continuance, as is seen in column 4; and 3d, that if we assume that, by abstracting the disturbances equalling or exceeding $5'0$, we may have eliminated *half* of the whole influence of the causes to which the larger disturbances are due (which is certainly no unreasonable supposition), we have the residual diurnal variation as in column 5, in which the westerly retrogression is almost wholly obliterated, and the variation has become virtually a single progression, with but one maximum and one minimum.

Viewing, then, the residual variation after the elimination of the influence of the disturbances as the best approximation we can obtain towards a representation of the phenomena of the regular solar-diurnal variation, and regarding this representation as corresponding to a *mean* state of the phenomena, or to that which would belong to all the days in the year if the sun's path were always in the plane of the equator, we find the mean solar-diurnal variation at Toronto to be approximately as follows:—The chief variation takes place during the hours when the sun is above the horizon; the motion of the north end of the magnet towards the east, which during the hours of the night is extremely slow, quickens between 4 and 5 A.M., and continues at a nearly uniform rate, exceeding $1'$ an hour, from 5 A.M. to a few minutes before 8 A.M., when the easterly extreme is reached. The north end then returns rapidly towards the west, attaining the westerly extreme of its daily progress about 20 minutes past 1 P.M. This interval is the time of most rapid motion, the whole amplitude or extent of the diurnal variation, amounting to about $10'$ of arc, being passed through in about $5\frac{1}{2}$ hours. The motion is most rapid between 10 and 11 A.M., when the change of direction in one hour is very nearly $4'0$. After reaching the westerly extreme, at or about 1h. 20m., the north end returns again towards the east, at a nearly uniform rate a little exceeding $1'0$ per hour, until near 6 P.M., at which time the night phase of the variation may be said to commence. This, apart from the disturbances, is a continuation of the easterly motion, but at a comparatively very slow rate, which, on the average of the 10 hours from 6 P.M. to 4 A.M., scarcely exceeds $0'16$ per hour.

Table LXVI. exhibits the solar-diurnal variation of the Declination in the different months of the year after the separation and omission of the larger disturbances. This table is similar in form to Table VII. in vol. II. (p. xv), but differs from it inasmuch as the latter is derived from *all* the observations, including the disturbances, and in this the disturbances are excluded. The sign + implies that the north end of the magnet is to the east, and — to the west, of the mean position in the month.

TABLE LXVI.

Months.	TORONTO ASTRONOMICAL HOURS.											
	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
January	-2'50	-3'34	-3'14	-2'44	-1'64	-0'92	-0'32	+0'06	+0'76	+1'02	+1'08	+0'66
February	-2'42	-3'30	-3'26	-2'54	-1'66	-1'36	-0'84	-0'38	+0'32	+0'92	+0'88	+0'60
March	-3'72	-5'22	-5'36	-4'78	-3'42	-2'18	-1'12	-0'56	-0'30	+0'22	+0'90	+1'02
April	-4'54	-5'98	-5'84	-4'98	-3'30	-1'66	-0'80	-0'32	+0'44	+0'44	+0'82	+1'12
May	-5'24	-6'28	-6'10	-4'84	-3'12	-1'26	-0'44	-0'22	-0'18	+0'16	+0'38	+0'50
June	-4'72	-6'20	-6'26	-5'26	-3'76	-1'68	-0'62	-0'28	-0'32	-0'22	+0'04	+0'66
July	-4'24	-5'86	-5'96	-5'12	-3'68	-1'86	-0'70	-0'36	-0'66	-0'16	+0'36	+0'58
August	-6'00	-7'22	-6'52	-5'04	-2'74	-1'02	-0'18	-0'12	-0'10	+0'48	+0'46	+0'52
September	-6'26	-6'38	-5'40	-3'36	-1'16	-0'42	+0'12	-0'06	+0'24	+0'64	+0'78	+0'06
October	-3'72	-4'20	-3'94	-2'66	-1'80	-1'24	-0'70	-0'22	+0'24	+0'58	+0'48	+0'62
November	-3'00	-3'80	-3'30	-2'52	-1'78	-1'10	-0'12	+0'64	+0'84	+0'96	+1'16	+1'16
December	-1'94	-3'02	-3'36	-2'38	-1'70	-0'80	0'00	+0'36	+0'88	+1'24	+1'10	+1'02
Semi-annual Means	April to Sept. Oct. to March											
Annual Means	-4'02	-5'07	-4'87	-3'83	-2'48	-1'29	-0'48	-0'12	+0'18	+0'52	+0'70	+0'71

(continued.)

Months	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .
January	+0'44	+0'12	+0'30	+0'42	+0'86	+0'50	+0'74	+1'28	+2'66	+2'90	+1'48	-0'38
February	+0'44	+0'34	+0'14	+0'62	+0'76	+1'34	+1'64	+2'00	+2'92	+2'78	+1'46	-0'50
March	+1'12	+0'96	+1'12	+1'28	+1'50	+1'56	+2'26	+3'52	+4'72	+4'54	+2'52	-0'74
April	+0'88	+1'14	+1'08	+1'48	+1'58	+2'36	+3'40	+4'64	+4'96	+3'96	+1'30	-2'02
May	+0'36	+0'82	+0'62	+0'68	+1'40	+3'18	+5'16	+6'04	+5'82	+4'18	+0'64	-3'06
June	+0'42	+0'20	+0'02	+0'02	+1'40	+3'04	+5'28	+6'36	+6'20	+4'72	+1'73	-2'00
July	+0'76	+0'70	+0'48	+0'12	+0'92	+2'78	+4'52	+6'50	+6'26	+4'86	+1'78	-1'76
August	+0'54	+0'82	+0'52	+0'72	+0'94	+2'52	+5'22	+6'94	+6'90	+4'76	+0'54	-3'12
September	+0'76	+0'74	+1'06	+1'40	+1'96	+2'64	+3'90	+5'22	+4'80	+3'00	+0'56	-3'70
October	+0'56	+0'58	+0'92	+0'92	+1'20	+1'70	+1'84	+2'74	+3'66	+3'04	+1'10	-1'66
November	+0'56	+0'12	0'00	+0'62	+0'52	+0'92	+1'28	+1'78	+2'90	+2'76	+1'26	-1'12
December	+0'68	+0'16	-0'04	+0'30	+0'46	+0'58	+0'58	+0'92	+1'46	+2'04	+1'62	-0'26
Semi-annual Means	April to Sept. Oct. to March											
Annual Means	+0'63	+0'54	+0'52	+0'71	+1'12	+1'93	+2'98	+3'99	+4'44	+3'63	+1'24	-1'69

SOLAR-DIURNAL VARIATION: HORIZONTAL FORCE.

xci

Table LXVII. exhibits the solar-diurnal variation of the Horizontal Force in the different months of the year, after the separation and omission of the larger disturbances. This table is similar in form to Table XXXIII. in vol. II., p. lix.

TABLE LXVII.

Months.	TORONTO ASTRONOMICAL HOURS.											
	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January -	-009	-060	-030	+021	+048	+045	+033	+020	+018	+012	+014	+008
February -	-065	-043	-010	+017	+028	+033	+027	+028	+019	+020	+012	+008
March -	-108	-070	-030	+017	+041	+051	+040	+033	+030	+021	+017	+014
April -	-086	-042	+005	+055	+074	+074	+055	+030	+012	+011	+008	+005
May -	-052	+010	+054	+081	+085	+081	+059	+030	+013	+005	+004	+001
June -	-042	+004	+058	+085	+095	+089	+067	+039	+015	000	-004	-015
July -	-032	+007	+049	+081	+092	+078	+055	+037	+013	+009	-004	+005
August -	-052	+003	+057	+090	+091	+080	+048	+023	+015	+015	+008	+011
September -	-067	-009	+045	+072	+076	+061	+053	+036	+021	+023	+022	+018
October -	-071	-038	-001	+024	+040	+043	+034	+031	+017	+015	+016	+008
November -	-091	-060	-017	+016	+028	+033	+032	+031	+025	+019	+020	+007
December -	-073	-052	-027	+005	+031	+031	+027	+021	+013	+010	+007	+002
Semi-annual Means } April to Sept. -	-056	-004	+045	+078	+085	+077	+056	+032	+015	+010	+006	+004
Oct. to March -	-085	-054	-019	+016	+037	+039	+032	+028	+020	+016	+013	+008
Annual Means -	-070	-029	+013	+047	+061	+058	+044	+030	+017	+013	+010	+006
(continued)												
Months.	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January -	000	+006	+005	+012	+022	+020	+031	+031	+024	-008	-051	-101
February -	+006	-001	+003	-007	+012	+017	+021	+010	-011	-030	-046	-063
March -	+014	+007	+011	+011	+019	+023	+035	+013	-016	-050	-085	-111
April -	+007	+008	+003	+012	+021	+024	+014	+011	-023	-070	-102	-112
May -	-005	-012	-006	-012	-009	-005	+001	-007	-036	-085	-105	-089
June -	-018	-019	-014	-023	-019	-012	000	-007	-033	-064	-098	-082
July -	-013	-008	-013	-014	-018	-017	-003	-011	-035	-067	-098	-081
August -	+007	+003	+009	+001	-007	-003	+001	-017	-062	-105	-118	-099
September -	+013	+008	+011	+003	+021	+024	+015	-009	-054	-103	-130	-115
October -	+006	+013	+015	+020	+032	+033	+032	+014	-027	-068	-094	-096
November -	+006	+011	+016	+019	+028	+039	+043	+034	-008	-048	-083	-103
December -	-007	-002	+007	+005	+015	+022	+034	+030	+021	-004	-040	-072
Semi-annual Means } April to Sept. -	-002	-003	-002	-006	-002	+002	+005	-006	-041	-082	-109	-097
Oct. to March -	+004	+005	+010	+010	+022	+026	+033	+022	-003	-034	-065	-092
Annual Means -	+001	+001	+004	+002	+010	+014	+019	+008	-022	-058	-087	-094

Table LXVIII. exhibits a corresponding table of the Vertical Force, similar in form to Table XXXIX, in vol. II., p. lxix, but with omission of the larger disturbances.

TABLE LXVIII.

Months.	TORONTO ASTRONOMICAL HOURS.											
	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - -	-0013	+0014	+0042	+0058	+0047	+0056	+0070	+0070	+0064	+0050	+0033	+0022
February - - -	-0068	-0024	+0042	+0087	+0084	+0086	+0081	+0074	+0055	+0055	+0033	+0027
March - - -	-0081	-0046	-0001	+0042	+0056	+0070	+0067	+0061	+0055	+0050	+0041	+0036
April - - -	-0077	-0033	+0031	+0068	+0082	+0077	+0063	+0090	+0068	+0027	+0004	-0013
May - - -	-0095	-0041	+0029	+0067	+0110	+0133	+0137	+0093	+0069	+0043	+0035	-0018
June - - -	-0075	-0067	-0005	+0077	+0116	+0131	+0106	+0111	+0074	+0055	+0017	+0000
July - - -	-0077	-0047	+0004	+0081	+0141	+0184	+0174	+0145	+0081	+0064	+0010	-0003
August - - -	-0047	+0005	+0070	+0007	+0143	+0159	+0133	+0097	+0081	+0014	+0008	-0033
September - -	-0023	+0046	+0090	+0109	+0110	+0110	+0095	+0065	+0061	+0045	+0029	-0011
October - - -	-0055	+0005	+0046	+0077	+0074	+0073	+0075	+0086	+0073	+0061	+0041	+0013
November - -	-0024	+0020	+0074	+0070	+0073	+0072	+0065	+0068	+0065	+0056	+0042	+0022
December - - -	-0028	+0013	+0054	+0072	+0060	+0054	+0043	+0055	+0054	+0056	+0042	+0022
Semi-annual Means } April to Sept.	-0066	-0023	+0036	+0085	+0117	+0132	+0118	+0100	+0072	+0041	+0017	-0013
Means } Oct. to March	-0045	-0003	+0043	+0068	+0066	+0068	+0067	+0069	+0061	+0055	+0039	+0024
Annual Means - -	-0055	-0013	+0040	+0076	+0091	+0100	+0092	+0084	+0067	+0048	+0028	+0005
(continued)												
Months.	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - -	-0004	-0022	-0028	-0041	-0047	-0045	-0027	-0027	-0036	-0068	-0072	-0064
February - - -	+0003	-0033	-0045	-0036	-0038	-0026	-0022	-0010	-0011	-0082	-0119	-0124
March - - -	+0003	-0023	-0036	-0020	-0003	-0020	-0011	+0017	+0018	-0038	-0101	-0128
April - - -	+0036	-0041	-0038	-0029	-0031	+0004	+0027	+0015	-0004	-0012	-0088	-0105
May - - -	-0045	-0063	-0056	-0043	-0026	-0003	+0019	+0001	-0027	-0074	-0125	-0124
June - - -	-0036	-0043	-0050	-0065	-0069	+0020	+0004	-0022	-0054	-0079	-0089	-0095
July - - -	-0029	-0074	-0119	-0116	-0093	-0052	+0004	-0005	-0028	-0050	-0078	-0087
August - - -	-0056	-0069	-0100	-0091	-0091	-0005	+0001	-0023	-0045	-0074	-0078	-0054
September - -	-0050	-0050	-0059	-0054	-0086	-0067	-0019	-0028	-0043	-0095	-0095	-0049
October - - -	-0017	-0051	-0041	-0026	-0051	-0063	-0040	-0019	-0027	-0056	-0081	-0091
November - -	-0009	-0033	-0046	-0050	-0050	-0049	-0061	-0033	-0046	-0077	-0090	-0070
December - - -	-0019	-0027	-0027	-0028	-0056	-0050	-0022	-0037	-0040	-0046	-0068	-0059
Semi-annual Means } April to Sept.	-0030	-0057	-0070	-0066	-0056	-0017	+0006	-0010	-0033	-0069	-0094	-0086
Means } Oct. to March	-0007	-0031	-0037	-0033	-0041	-0042	-0030	-0018	-0024	-0060	-0089	-0089
Annual Means - -	-0019	-0044	-0054	-0050	-0048	-0030	-0012	-0014	-0029	-0065	-0091	-0087

SOLAR-DIURNAL VARIATION: INCLINATION AND TOTAL FORCE.

xclii

From the diurnal variations of the Horizontal and Vertical Forces we obtain those of the Inclination and Total Force, as follows:—

TABLE LXIX.

Diurnal Variation of the Inclination and Total Force, omitting the larger Disturbances.—(The sign + signifies an Augmentation of the North Dip and of the Total Force; the sign — the converse.)

Toronto Astronomical Hours.	INCLINATION.			TOTAL FORCE.			Toronto Civil Hours.
	Semi-annual Means.		Annual Means.	Semi-annual Means.		Annual Means.	
	April to September.	October to March.		April to September.	October to March.		
n.	"	"	"	Parts of Force.	Parts of Force.	Parts of Force.	n.
12	— 0'5	— 2'5	— 1'5	— '000029	— '000003	— '000017	Midnight.
13	— 1'4	— 4'1	— 2'8	— '000055	— '000025	— '000040	1 a.m.
14	— 2'8	— 7'0	— 4'8	— '000067	— '000028	— '000048	2 a.m.
15	— 0'3	— 6'7	— 3'5	— '000066	— '000026	— '000046	3 a.m.
16	— 1'9	— 13'3	— 7'5	— '000053	— '000024	— '000039	4 a.m.
17	— 2'1	— 15'3	— 8'7	— '000015	— '000022	— '000019	5 a.m.
18	— 2'2	— 18'2	— 10'3	+ '000009	— '000006	+ '000001	6 a.m.
19	+ 2'8	— 12'1	— 4'8	— '000015	— '000002	— '000008	7 a.m.
20	+ 19'1	+ 0'3	+ 9'7	— '000058	— '000024	— '000041	8 a.m.
21	+ 38'2	+ 14'2	+ 26'2	— '000119	— '000078	— '000098	9 a.m.
22	+ 50'5	+ 28'4	+ 39'5	— '000160	— '000127	— '000142	10 a.m.
23	+ 44'8	+ 42'2	+ 43'4	— '000144	— '000143	— '000143	11 a.m.
0	+ 25'1	+ 40'8	+ 32'8	— '000097	— '000098	— '000097	Noon.
1	+ 0'9	+ 27'2	+ 14'0	— '000024	— '000039	— '000031	1 p.m.
2	— 21'0	+ 11'8	— 4'7	+ '000064	+ '000028	+ '000046	2 p.m.
3	— 35'3	— 4'7	— 20'0	+ '000130	+ '000075	+ '000102	3 p.m.
4	— 37'2	— 15'3	— 26'2	+ '000165	+ '000086	+ '000125	4 p.m.
5	— 32'4	— 16'3	— 24'4	+ '000173	+ '000089	+ '000131	5 p.m.
6	— 22'4	— 12'9	— 17'7	+ '000146	+ '000085	+ '000115	6 p.m.
7	— 11'2	— 10'7	— 10'9	+ '000113	+ '000083	+ '000098	7 p.m.
8	— 3'9	— 6'9	— 5'4	+ '000078	+ '000071	+ '000074	8 p.m.
9	— 3'1	— 5'6	— 4'3	+ '000044	+ '000062	+ '000053	9 p.m.
10	— 2'2	— 4'6	— 3'5	+ '000020	+ '000045	+ '000032	10 p.m.
11	— 2'8	— 2'8	— 2'8	— '000009	+ '000028	+ '000009	11 p.m.

In the case of the Total Force, the diurnal variation due to the mean effect of the larger disturbances bears so large a proportion to the regular solar-diurnal variation, that when one is superimposed upon the other, and they are viewed in combination, —as is the case when the diurnal variation is obtained from the whole of the observations including the disturbances,—the true character of the regular ordinary solar-variation is altogether masked, and we are in danger of drawing erroneous conclusions in regard to it. Thus, in Vol. I. of the Toronto Observations, pp. lxx, lxxi, the

diurnal variation being there derived from *the whole* of the observations, the principal features appeared to be, and were stated as follows :—

A principal maximum at 5 hours.

A principal minimum at 15 hours.

A secondary maximum at 18 to 20 hours.

A secondary minimum at 22 or 23 hours.

The first thing we learn by the separation of the disturbances is, that the “principal minimum” so stated as occurring “at 15 hours” is either wholly or in very great part an effect of the disturbances which have their maximum influence in diminution of the force at that hour; and that the true curve of the solar-diurnal variation of the Total Force (like that of the Declination, p. lxxxix) has but one notable inflection in the 24 hours, viz. that which takes place during the hours when the sun is above the horizon. Referring to Table LVII., p. lxxii of the present volume, it will be seen that the diminution of the Total Force at 15 hours occasioned by the larger disturbances averages $\cdot 000138$ parts of the Total Force in every day of the year; whilst from Table LXX., p. xcii, we learn that the diminution of the force at the same hour from the solar-diurnal variation obtained from the observations remaining after the separation and omission of the larger disturbances amounts to not more than $\cdot 000045$ parts of the force. The combination of these two effects, referable as they are to different causes, produced therefore at 15 hours the apparent minimum of the force, amounting to $(\cdot 000138 + \cdot 000045 =) \cdot 000183$ parts of the force. Now of the two components which form the combined amount, it is obvious that the one depending on the disturbances would be increased, and the other component diminished, in amount, if the values assumed to constitute large disturbances of the Horizontal and Vertical Forces had been taken somewhat smaller than they have been assumed in the preceding pages: and as the remark in p. lxxvii regarding the declination-disturbances is equally true in reference to those of the Total Force, viz. that inasmuch as the larger disturbances separated by the processes described can by no means be supposed to include *the whole* of the disturbances of the class to which they belong, we must regard the mean diurnal variation obtained from them simply as a “minimum limit,” which would certainly be exceeded if we could succeed in separating the minor effects of the same causes;—we may likewise reasonably infer in the case of the Total Force, that were the process of separation of the disturbances carried a little further than it has been in these pages, the small portion of the diminution of the force at 15 hours ($\cdot 000045$) which remains referable to the solar-variation would be progressively reduced, whilst that of the other component would be increased.

The general conclusion, therefore, to which we may be justified in arriving, is, that although we are unable to separate the effects of the two causes so completely as to assign the exact values of each of the components, we are enabled, by the processes

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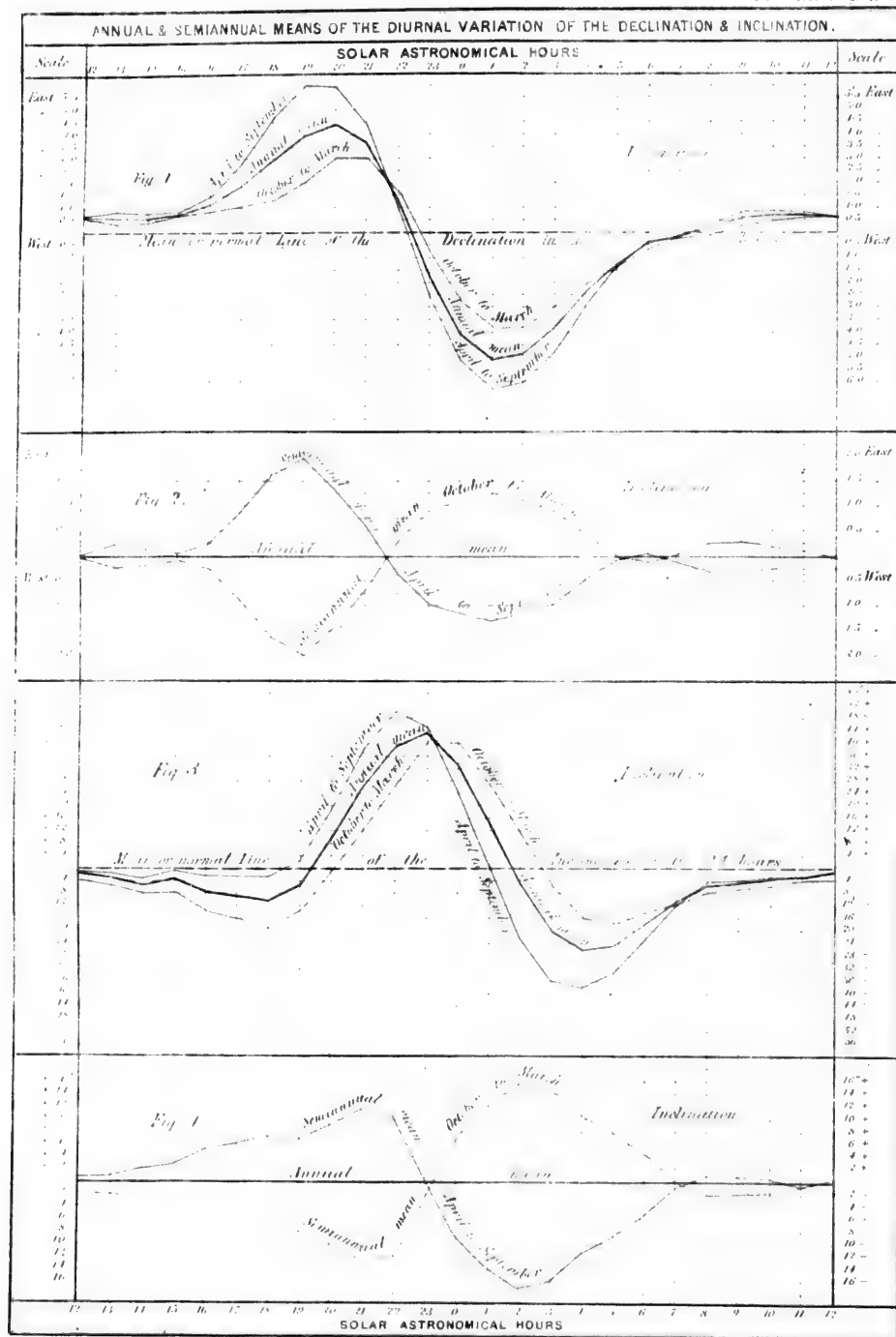
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SOLAR-DIURNAL VARIATION: ANNUAL INEQUALITY.

xv

which have been adopted, to separate them so far, as to have no difficulty in assigning (approximately at least) the general character which each of the components would have if we could make a perfect separation between them. In such case the character of the solar-diurnal variation of the Total Force would appear to be nearly as follows: From about 18 or 19 hours (6 or 7 A.M.) the force begins to diminish sensibly, and continues to do so until nearly 23 hours (11 A.M.), when it reaches its minimum in the 24 hours; it then increases, and continues to do so until about 5 or 6 hours (5 or 6 P.M.); after which it remains without any notable inflection during the hours of the night and until after sunrise. The minimum which occurs between 10 and 11 A.M. (nearer 11 than 10) may be taken at between '000140 and '000150 parts of the force below the average in the 24 hours. In Plate IV., Fig. 3., p. xvi, the *dotted* line shows the diurnal variation derived from the whole of the observations, disturbances included; in this curve, consequently, the mean disturbance-variation is combined with the regular solar-diurnal variation. The *continuous* line presents the diurnal variation derived from the observations when the *larger* disturbances have been separated and withdrawn. This line consequently *approximates* to the form which the curve of the solar-diurnal variation would present if the whole influence of the disturbances could be eliminated. The third or *broken* line further represents this curve on the supposition that the *larger* disturbances constitute about *two-thirds* of the whole disturbing influence.

ANNUAL INEQUALITY OF THE SOLAR-DIURNAL VARIATION.

The solar-diurnal variation obtained from the mean of the twelve months (entitled "Annual Means," in the tables pp. xc to xciii) represents the variation which it may be presumed would take place in every day of the year if the sun's path were always in the plane of the equator. But this is only the case at the equinoxes; and we have now to inquire into the *inequality* to which the diurnal variation is subject in different parts of the year in consequence of changes in the sun's declination. For this purpose the diurnal variations in the different months may be divided into two groups,—one composed of the six months when the sun has northern declination, and the other of the six months when he has southern declination. The means of each of the two semi-annual groups are shown, for the Declination in Table LXVI., p. xc, and for the Inclination and Total Force in Table LXIX., p. xciii. These means represent, respectively, the diurnal variation at the particular epochs when the sun is half way between the equator and either tropic, and show consequently the character and about half the amount of the range of the inequality which the diurnal variation undergoes in the different parts of the year. The phenomena now under consideration will perhaps be best apprehended by a reference to Plate III., in which (Fig. 1.) the black

curve exhibits (in arc-value) the mean diurnal variation of the Declination in the twelve months, or that which corresponds strictly with the equinoctial epochs; the red curve shows the mean of the six months (April to September) when the sun is between the equator and the northern tropic; and the blue curve the mean of the six months (October to March) when the sun is between the equator and the southern tropic. In Fig. 2. the same phenomena are represented in a different form: the "annual mean," or the diurnal variation at the equinoxes, which is the black curve in Fig. 1., is here drawn as a straight horizontal line, and the red and blue curves are projected at their respective distances from it at the several hours, and for greater distinctness on a scale of twice the magnitude of that in Fig. 1. The annual and semi-annual curves of the diurnal variation of the Inclination are represented in a similar manner in Figs. 3. and 4. of the same plate; and those of the Total Force in Figs. 1. and 2. of Plate IV. The red and blue curves have a like signification in regard to season in all the six figures; viz. the red curves correspond to the variation when the sun is north of the equator, and the blue curves to the variation when he is south of the equator.

The annual inequality which is thus manifested has been made, in the case of one of the elements, viz. the Declination, the subject of a particular discussion in papers presented respectively to the British Association and to the Royal Society.—("Reports of the British Association," 1854, pp. 355—368; and "Proceedings of the Royal Society," May 18th, 1854, pp. 67—82.) The object of these communications was to call the early notice of magneticians to the fact that the annual inequality of the diurnal variation of the Declination, as severally derived from the observations at Toronto, St. Helena, and Hobarton, presented so remarkable an accord in character and amount as to give reason to believe that they are general phenomena. The discussion was confined to the one element because the corresponding phenomena of the Inclination and of the Total Force had not then been made out. These are now given for Toronto, and will be so for St. Helena and Hobarton in the volumes now preparing, which will contain the suite of the observations at those Observatories, when the discussion will be resumed.

SECULAR CHANGE OF THE VERTICAL FORCE.

For this investigation we have the hourly observations of the Vertical Force Magnetometer from February 1844 to June 1848 inclusive. In the following table the monthly means of those observations are collected, having been reduced to a uniform temperature by employing the equivalents for 1° of Fahrenheit obtained in pp. xxii—xxvi.

Fig. 1

SOLAR ASTRONOMICAL HOURS.

Y-axis: Force in the 24 hours (0 to 1.00000).
 X-axis: Solar Astronomical Hours (12 to 12).
 Legend:
 - Mean or normal line of the total force in the 24 hours (dashed line)
 - October to March (solid line)
 - Annual means (dotted line)
 - April to September (solid line)

Fig. 2

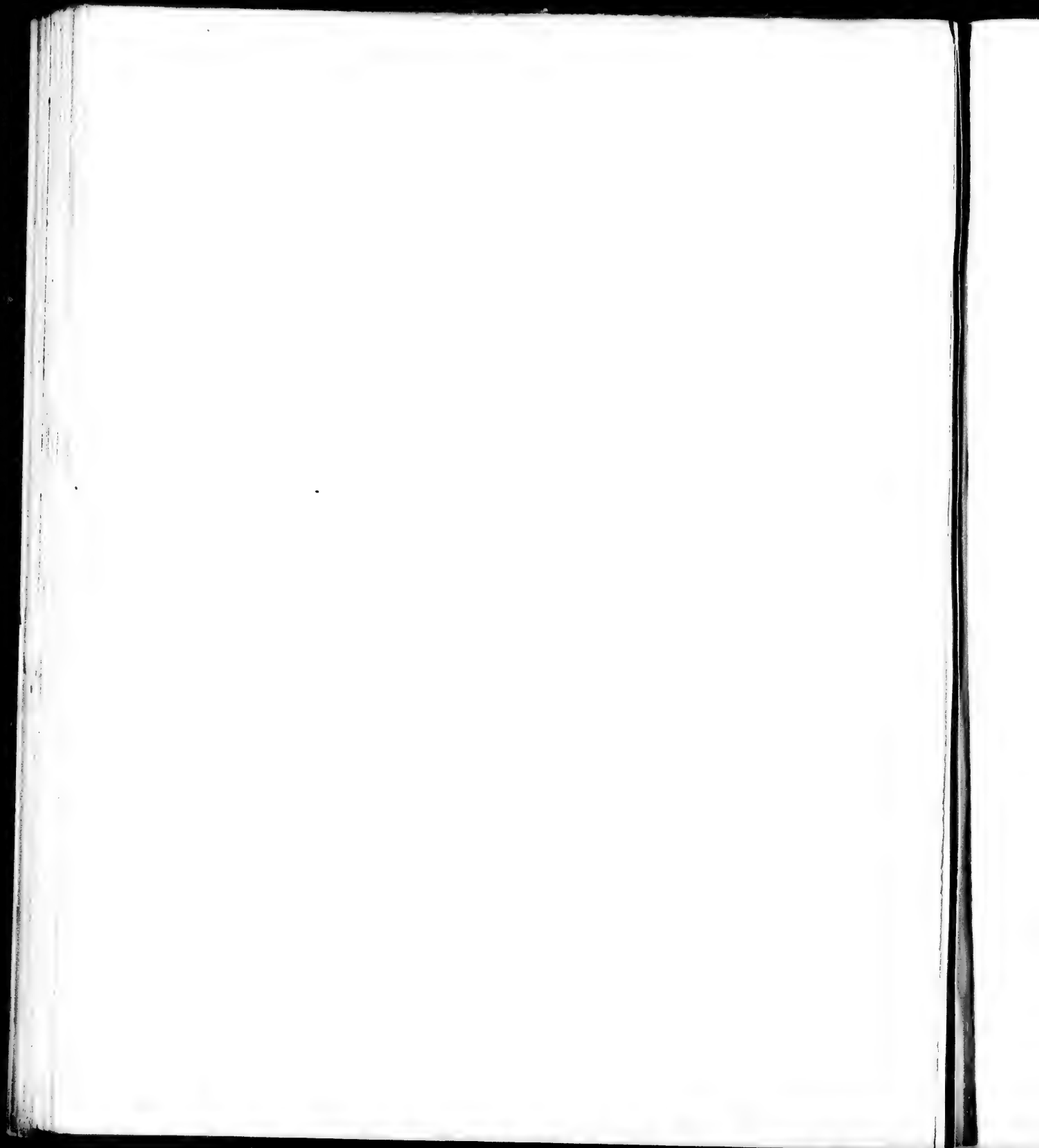
Y-axis: Force in the 24 hours (0 to 1.00000).
 X-axis: Solar Astronomical Hours (12 to 12).
 Legend:
 - October to March (solid line)
 - Annual means (dotted line)
 - April to September (solid line)

SOLAR DIURNAL VARIATION OF THE TOTAL FORCE.

Y-axis: Force in the 24 hours (0 to 1.00000).
 X-axis: Solar Astronomical Hours (12 to 12).
 Legend:
 - Including the disturbances (solid line)
 - Excluding the larger disturbances (dashed line)
 - Excluding the larger disturbances (dotted line)

Fig. 3

SOLAR ASTRONOMICAL HOURS



SECULAR CHANGE OF THE VERTICAL FORCE.

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TABLE LXX.

Months.	Monthly Means.		Equivalent to 1° Temperature.	Reduced to 55°.	Months.	Monthly Means.		Equivalent to 1° Temperature.	Reduced to 55°.		
1844:					1846:						
February	-	124'9	44'3	Se. Div. 1'80	105'6	April	-	214'0	54'7	Se. Div. 1'64	213'5
March	-	121'8	46'5	"	106'5	May	-	198'3	62'8	"	211'1
April	-	99'0	56'5	"	101'7	June	-	185'7	68'6	"	208'0
May	-	88'0	60'5	"	97'9	July	-	173'7	73'6	"	204'2
June	-	75'1	64'8	"	92'7	August	-	170'8	73'7	"	201'5
July	-	60'2	69'7	"	86'7	September	-	175'9	69'5	"	199'7
August	-	58'5	68'3	"	82'4	October	-	197'1	56'6	"	199'7
September	-	61'4	65'1	"	79'6	November	-	200'6	52'8	"	197'0
October	-	83'6	53'4	"	80'7	December	-	210'2	43'0	"	190'5
November	-	95'1	47'1	"	80'9	1847:					
December	-	101'1	42'7	"	79'0	January	-	209'0	40'3	"	184'9
1845:					February	-	203'4	42'3	"	182'6	
January	-	99'5	42'7	"	77'4	March	-	200'7	44'6	"	183'6
February	-	93'3	42'9	"	71'5	April	-	188'9	51'4	"	183'0
March	-	82'9	48'0	"	70'3	May	-	171'8	60'3	"	180'5
April	-	72'1	53'6	"	69'6	June	-	161'9	63'9	"	176'5
May	-	58'6	59'4	"	66'5	July	-	143'1	73'0	"	172'6
June	-	90'8	67'1	1'80	112'6	August	-	145'4	70'4	"	170'7
July	-	68'9	72'0	"	99'5	September	-	160'8	62'4	"	172'9
August	-	197'9	72'9	1'80	230'1	October	-	172'5	56'1	"	174'3
September	-	148'0	63'1	1'80	162'6	November	-	179'8	51'6	"	174'2
October	-	157'1	57'6	"	161'8	December	-	188'3	45'2	"	172'2
November	-	167'1	50'0	"	158'1	1848:					
December	-	182'3	40'8	"	156'7	January	-	187'2	43'4	"	168'2
1846:					February	-	182'5	43'9	"	164'3	
January	-	174'0	44'7	"	155'5	March	-	177'7	46'7	"	164'1
February	-	177'0	42'7	"	154'9	April	-	165'9	53'3	"	163'1
March	-	163'4	50'0	"	151'4	May	-	148'9	61'5	"	159'6
						June	-	133'7	68'2	"	155'3

Omitting June, July, and August 1845, on account of breaks in the continuity, we have in this table three continuous series, each comprising several months, during which the Magnetometer was undisturbed; viz. February 1844 to May 1845 inclusive, 16 months; September 1845 to March 1846 inclusive, 7 months; and April 1846 to June 1848 inclusive, 27 months. In each of these periods the mean monthly scale readings, when reduced to a uniform temperature, decreased, indicating (on the supposition of the magnetism of the needle having been constant) a diminution in the amount of the terrestrial Vertical Force. The mean value of a scale division in the two first series was '000063 parts of the Vertical Force, and in the third series '000066 parts of the force. The first series will then furnish 16 equations for the value of x , the mean monthly decrease in scale divisions; the second series 7 equations, and the third series 27 equations for the same. From these we have the values of x respectively as follows:—

For the first period of 16 months, $x = 2.64$ scale divisions.

For the second period of 7 months, $x = 1.47$ " "

For the third period of 27 months, $x = 2.06$ " "

The mean of the 23 months composing the first and second periods, allowing weight proportioned to the number of months in each, is 2.28 scale divisions per month, = .000143 parts of the force. The mean of the 27 months composing the third period is 2.06 scale divisions, = .0001365 parts of the force. Hence, on the aforesaid supposition that the magnetism of the needle was constant, we may take the mean between two results which differ so little from each other, viz. .00014, as the approximate monthly diminution of the Vertical Force from February 1844 to June 1848 inclusive, corresponding to an *annual* decrease of .0017 parts of the force.

The degree of regularity with which the Vertical Force Magnetometer indicated this decrease may be estimated by the probable error of the monthly decrease in the mean scale readings during the third and longest period, which was of 27 months' duration. The monthly decrease was 2.06 scale divisions; the probable error of 2.06 is ± 0.44 , which includes the irregularities occasioned by the disturbances. Judging from the very satisfactory performance of the Toronto instrument which is here indicated, it would appear that the capabilities of the Vertical Force Magnetometer, when used with due precaution and care, have been generally very much underrated.

It may be desirable to show how little the question, so important in many other investigations, of the omission or retention of the larger disturbances of the Vertical Force, affects the indication of the amount of the secular change of that element, derived from an unbroken series of observations of the Vertical Force of many months' continuance. The monthly means reduced to 55° Fahrenheit, from April 1846 to June 1848, in page xvii, were taken from the whole of the observations of that period, and consequently included the disturbances; but when the larger disturbances, or all those which exceed 4.0 scale divisions from the respective normals, are withdrawn, the monthly means for the same period, also at 55° Fahrenheit, become as follows:—

TABLE LXXI.

Months.	Scale Divisions.	Months.	Scale Divisions.	Months.	Scale Divisions.
1846 :		1847 :		1847 :	
April - - -	213.0	January - -	184.6	October - -	173.9
May - - -	211.1	February - -	182.6	November - -	173.8
June - - -	208.4	March - - -	183.6	December - -	171.6
July - - -	205.2	April - - -	183.1	1848 :	
August - - -	203.4	May - - -	180.5	January - - -	168.3
September - -	200.8	June - - -	176.5	February - - -	165.4
October - - -	200.6	July - - -	172.8	March - - -	164.2
November - - -	197.2	August - - -	171.1	April - - -	163.3
December - - -	190.4	September - -	172.2	May - - -	159.9
				June - - -	155.6

From these we obtain by least squares, as the most probable value of the monthly decrease, 2.08 scale divisions, with a probable error of ± 0.44 , both being almost identical with the results stated in p. xcvi as obtained from the monthly means of the observations when the disturbances were retained.

We are naturally led by the satisfactory performance of the Vertical Force Magnetometer between the years 1844 and 1848 to examine the observations made with it at an earlier period, which did not receive perhaps their due consideration at the time, from the belief, which appears to have been pretty general, that this instrument was "unavailable for the determination of changes of long period;" and from the circumstance that the Bifilar Magnetometer, from which so much more was expected, did not yield at Toronto results from which any satisfactory conclusion whatever could be arrived at in regard to the secular change of the other component of the Total Force, viz. the Horizontal Force; for which a distinct instrument, the Unifilar, was in consequence supplied. Reverting to Vol. I. of the Toronto Observations, pp. liii to lvii, we find the following to be the history of the early observations of the Vertical Force Magnetometer:—During the first year, viz. September 1840 to September 1841, the magnet was occasionally (six times in the twelve months) dismounted, for the purpose of having its time of vibration in the *horizontal* plane ascertained. On each of these occasions, consequently, the readings were disconnected, and the continuity of the series interrupted. From October 1841 to October 1843, (at which latter date the magnet was again dismounted to examine the effect of changes of temperature on its magnetic moment,) the magnet was undisturbed, except by its being made to vibrate from time to time in small arcs, in order to ascertain its time of vibration in the *vertical* plane. For this purpose it was not necessary to touch the magnet, as it was put in vibration by another magnet, and was brought back by the Ψ 's to its proper position on the supports. The frequency with which this examination was made and the times of vibration severally deduced therefrom, are shown in Vol. I., Table XXXVIII., pp. liv and lv, and in Vol. II., Table XXXV., p. lxi. We have here, therefore, another period of 25 months (October 1841 to October 1843 inclusive) in which, assuming, as before, the constancy of the magnetism of the Vertical Force needle, we know of no cause (excepting variations of temperature) to interfere with the indications of the instrument as a true measure of the variations of the Vertical force. The monthly means of the observations, and of the corresponding temperatures, are contained in the following table. They were taken two-hourly from October 1841 to June 1842, and hourly from July 1842 to October 1843.

TABLE LXXII.

Months.	Scale Divisions.	Temperature.	Months.	Scale Divisions.	Temperature.	Months.	Scale Divisions.	Temperature.
1841 :			1842 :			1843 :		
October -	96.7	51.3	July -	57.8	69.3	April -	63.2	53.0
November -	102.7	48.6	August -	53.9	69.3	May -	55.4	57.3
December -	109.5	42.3	September -	58.0	63.0	June -	43.9	63.7
			October -	65.4	56.7	July -	32.8	70.1
1842 :			November -	76.3	47.8	August -	26.5	71.3
January -	107.1	41.1	December -	81.9	42.0	September -	29.9	65.6
February -	106.1	41.7				October -	39.5	57.1
March -	97.0	47.9	1843 :					
April -	86.6	54.4	January -	75.6	45.1			
May -	81.8	57.0	February -	81.5	39.4			
June -	72.2	61.9	March -	78.6	41.5			

Putting Y' for the most probable monthly mean-reading in October 1842, x for the monthly change, y the equivalent in scale divisions for 1° of temperature, and a and b coefficients respectively of x and y , a being reckoned in months from the mean epoch, — if earlier and + if later, and b reckoned in degrees of Fahrenheit from a standard temperature of 55° , — if lower and + if higher, we have 25 equations, from which by least squares we obtain $Y' = 70.6$ scale divisions, $x = -2.19$ scale divisions, and $y = -1.32$ scale divisions.

From the contents of Table XXXVIII., Vol. I. pp. liv and lv, we find the scale coefficient (k) during this period to have averaged, with slight and apparently accidental variations, .0000935; the magnetic force of the needle having been stronger than in the subsequent period from February 1844 to May 1845, the experiments between October and February 1844 to ascertain the temperature correction having had the effect, as is frequently the case, of sensibly weakening the magnet. The value just found for y (-1.32), multiplied by k , gives .000123 as the variation, in parts of the force, of the magnetic moment of the needle by a change of 1° of Fahrenheit. This is a somewhat higher value than .000110, found by subjecting the later observations to a similar process (see *ante*, p. xxvii), but the difference is small, and quite unimportant in the present investigation. The mean monthly decrease of the Vertical Force is $2.19 \times .0000935 = .00020$; or the annual decrease = .0024. This is also a somewhat larger annual decrease than was found by the later observations, but for this there may be an assignable reason. A secular change of the Vertical Force may proceed from either of two sources (or from both conjointly); viz. a secular change in the Earth's Total Force, or a secular change of the Inclination. Whilst whatever secular change may exist in either or both these elements preserves

a uniform rate, the secular change of the Vertical Force will be uniform also: but if the secular change of either varies, that of the Vertical Force will vary also. Now we have reason to know from the monthly observations of the Inclination between January 1841 and December 1855, discussed in the sequel of this volume, that about the beginning of 1844 the secular change of the Inclination altered from a previously existing annual decrease, to an annual increase. Assuming, therefore, the secular change of the Earth's Total Force, whatever it may have been, to have had the same value in 1841—1843 as in 1844—1848, then, in consequence of the alteration in the secular change of the Inclination, the Vertical Force if losing must have lost more (or if gaining must have gained less) in 1841—1843 than in 1844—1848. The observations of the Inclination would therefore lead us to expect what we have found, viz. that the apparent loss of the Vertical Force, as it may be inferred from the Magnetometer observations in 1841—1843 (assuming the constancy of the magnetism of the needle), should be greater than in 1844—1848.

Thus far in the discussion it has been assumed that the magnetism of the Vertical Force needle was constant; we have now to examine, as far as the materials which have been furnished for the purpose will permit, how far this was the case. The data which we possess are the times of vibration in the horizontal or in the vertical planes observed at particular epochs in the course of the Magnetometer observations. We will commence with the times of horizontal vibration, as being those best suited at Toronto to give a satisfactory result. Now, to ascertain whether a change may have taken place in the magnetic moment of a needle during a certain period from the times of horizontal vibration at its commencement and close, and what that change may have been, it is necessary to know by some independent mode the alteration which may have taken place in the interval in the terrestrial Horizontal Force itself. When the Observatories were first instituted, it was hoped that the secular changes of the Horizontal Force might have been derived from the observations made with the Bifilar magnet; but the experience of the two or three first years led to the substitution for that purpose of a distinct apparatus and a special course of observation. It was not until January 1845 that the series of determinations of the absolute Horizontal Force were commenced with the Unifilar Magnetometer, which had been sent from Woolwich to Toronto for the purpose of supplying this failure in the Bifilar. The observations with the Unifilar, discussed in the sequel of this volume, show that from January 1845 to December 1852 inclusive the mean annual decrease of the terrestrial Horizontal Force was $\cdot 00371$ in absolute measure; or

$$\frac{\Delta X}{X} = - \frac{\cdot 00371}{3 \cdot 53} = - \cdot 00105;$$

and as it further appears by the monthly determinations of the Inclination, also discussed in the sequel of this volume, that we may assume the annual increase of the Inclination from the commencement of 1844 to the

end of 1855 to have been approximately uniform, and to have averaged 0.8, we may perhaps venture to extend the estimate of the annual decrease of the Horizontal Force ($\frac{\Delta X}{X} = -0.0105$ from January 1845 to December 1852) to one year beyond those limits—namely, 1844; whereby we may obtain a standard of comparison for the times of horizontal vibration of the Vertical Force needle observed between February 1844 and June 1848, applicable to the whole of the Magnetometer observations in Table LXX.

(It will be seen by the observations of the Inclination that we should not be justified in extending the same annual increase of the Inclination to the years preceding 1844; and since the annual change of the Horizontal Force is in part dependent on that of the Inclination, we are not possessed of sufficient data to permit a satisfactory deduction of the rate of change of the magnetism of the needle to be derived from its horizontal vibrations from an earlier date than February 1844.)

In November 1843, and to the beginning of February 1844, the Vertical Force needle was dismounted for the purpose of having experiments made on its temperature correction. By these experiments the magnetism of the needle was considerably weakened: its time of *vertical* vibration, which had been 10.31 in October 1843, was found in February 1844, 12.79 (Vol. II., Table XXXV., p. lxi). It happened accidentally that at the time when the second Toronto volume was published, it was not known at Woolwich that any observations had been made on the time of horizontal vibration between September 30, 1841, and March 26, 1846 (as stated in Vol. II., p. lxi). It was obvious, however, from the difference in the times of vertical vibration referred to above, that the needle had sustained a considerable loss of force during the temperature experiments (October 1843 to February 1844), and that this must have been known to Captain Younghusband, who was then Director of the Observatory. Believing, from the usual careful habits of that officer, that it was very unlikely that he should have remounted the needle for a fresh series of Magnetometer observations without previously observing its time of horizontal vibration, I had the "Miscellaneous Register Book" examined, in which a record of the observations, if made, would probably be found, and which book had been sent home to Woolwich when the Observatory was transferred to the provincial authorities. I have thus ascertained that the time of horizontal vibration was observed, as I had expected, on the 5th and 6th of February 1844, before the needle was remounted, and again in the beginning of June 1845, when the first of the continuous series in Table LXX. was completed. The time of horizontal vibration was again observed on the 26th of March 1846, when the second continuous series terminated. The needle was then remagnetized; its time of horizontal vibration observed before it was remounted, in the

beginning of April 1846, for the third series; and again observed on the 28th of February 1849. The times of vibration at these several dates were as follow:—

1844, February 5th and 6th	- Three observations	- 11 ^s 460.
1845, June - - -	- " -	- 11 ^s 490.
1846, March 26th - -	- " -	- 11 ^s 4965.
1846, April 1st - - -	- " -	- 10 ^s 2879.
1849, February 28th - -	- Two observations	- 10 ^s 3649.

For the change in the magnetic moment of the needle in the first of the three continuous series in Table LXX. (viz. of 16 months, from February 1844 to May 1845 inclusive) we have consequently an increase in the time of the needle's horizontal vibration of $(11^s 490 - 11^s 460 =) 0^s 030$ in 16 months, or $\cdot 0223$ in a year, corresponding to a proportionate decrease of $\cdot 00389$ in parts of the force. But the Horizontal Force itself decreased during the same period at the average rate of $\cdot 00105$ in a year (p. ci). We find, therefore, the proportionate loss of force of the needle between February 1844 and June 1845 to have been at the mean annual rate of $(\cdot 00389 - \cdot 00105 =) \cdot 00284$. Now it has been shown (p. xeviii) that in the same period the monthly scale-readings of the Vertical Force Magnetometer diminished at the average rate of 2[·]64 scale divisions in a month, or 31[·]68 in a year, corresponding to $(31\cdot 68 \times \cdot 0000628 =) \cdot 00199$ parts of the force; therefore the true secular change of the Vertical Force in those 16 months, allowing for the change in the magnetism of the needle, was an *increase* at the mean rate of $(\cdot 00284 - \cdot 00199 =) \cdot 00085$ in a year.

For a similar deduction during the second continuous series in Table LXX. (seven months, from September 1845 to March 1846) we have an increase in the time of horizontal vibration of $(11^s 4695 - 11^s 460 =) 0^s 0095$ in seven months, or $\cdot 0163$ in a year, corresponding to a proportionate decrease of $\cdot 00284$ in parts of the force; we have, therefore, a proportionate loss of force of the needle between September 1845 and March 1846 of $(\cdot 00284 - \cdot 00105 =) \cdot 00179$. The mean monthly decrease in the scale-readings of the Magnetometer (p. xeviii) was 1[·]47 scale divisions, or 17[·]64 in a year, corresponding to $(17\cdot 64 \times \cdot 0000628 =) \cdot 00111$ parts of the force. Therefore the secular change of the Vertical Force in these seven months was an increase at the mean rate of $(\cdot 00179 - \cdot 00111 =) \cdot 00068$ in a year.

For the third and longest series in Table LXX. (27 months, April 1846 to June 1848 inclusive) we have a mean rate of increase in the time of the needle's horizontal vibration, derived from the observations of the 1st of April 1846 and the 28th of February 1849, of $(10^s 3649 - 10^s 2879 =) 0^s 077$ in 35 months, or $\cdot 0264$ in a year, corresponding to a proportionate decrease of $\cdot 00513$ in parts of the force; and therefore an annual diminution of the magnetic moment of the needle of $(\cdot 00513 - \cdot 00105 =) \cdot 00408$ in a year. The mean monthly decrease in the scale-readings of the Mag.

netometer between April 1, 1846, and June 30, 1848, was $2\cdot08$, or $24\cdot96$ in a year; and the corresponding decrease in parts of the force ($24\cdot96 \times \cdot0000662 =$) $\cdot00165$; therefore the secular change of the Vertical Force in this period, allowing for the change in the magnetism of the needle, was an increase at the mean annual rate of ($\cdot00108 - \cdot00165 =$) $\cdot00243$ parts of the force.

Between February 1844 and June 1848 we have, therefore, three continuous series with the Vertical Force Magnetometer, by each of which we find the secular change of the Vertical Force at Toronto to have been an increase. The results collected are as follow:—

February 1844 to May 1845 inclusive, 16 months; rate of annual increase	$\cdot00085$
September 1845 to March 1846 " 7 " "	$\cdot00068$
April 1846 to June 1848 inclusive 27 " "	$\cdot00243$

Giving each of these results weight proportioned to the time it represents, we have a mean annual increase of the Vertical Force derived from 50 months of Magnetometer observations of $\cdot00168$ parts of the force.

Secular Change of the Total Force.—We have thus the mean annual secular change of the Vertical Force between February 1844 and June 1848, $\frac{\Delta Y}{Y} = +\cdot00168$; and from the monthly determinations of the absolute Horizontal Force, discussed in the sequel of this volume, $\frac{\Delta X}{X}$ at the same period $= -\cdot00105$; and as $\frac{\Delta \phi}{\phi} = \cos^2 \theta \cdot \frac{\Delta X}{X} + \sin^2 \theta \cdot \frac{\Delta Y}{Y}$, and θ at the mean epoch $= 75^\circ 16'$, we have—

$$- \cdot00105 \cdot \cos^2 75^\circ 16' + \cdot00168 \cdot \sin^2 75^\circ 16' = +\cdot0015 = \frac{\Delta \phi}{\phi}$$

or $\Delta \phi = +\cdot0015 \times 13\cdot9 = +\cdot0208$, the annual increase of the Total Force in absolute measure.

The conclusions to be drawn from the times of *vertical* vibration, in regard to the loss of magnetic force which the needle sustained during the Magnetometer observations (and, correlatively, to the increase of the Earth's Vertical Force during the same period), must necessarily be less satisfactory than those derived from the times of horizontal vibration, because we have no independent measure, by a distinct apparatus (as we have in the case of the Horizontal Force), of the change which the Vertical Force underwent in the interval during which the vertical vibrations measured the constant or varying product of the Earth's Vertical Force into the force of the needle. In referring to Vol. II., Table XXXV., p. lxi, it will be seen that the monthly series of observations of

the times of vertical vibration between February 1844 and June 1848 may be divided into two distinct portions; the first comprising from February 1844 to March 1846 (the needle having been remagnetized on the 28th of March 1846), and the second portion comprising from April 1846 to June 1848. In the first interval the small decrease which will be seen to have taken place in the times of vibration indicates an increase,—and on the other hand the small increase in the times of vibration in the second interval indicates a decrease,—in the product of the magnetic force of the needle into the Earth's Vertical Force. The increase in the one interval and the decrease in the other are both extremely small, and, when the two intervals are taken together, in great measure counterbalance each other. We may therefore regard the times of vertical vibration as indicating a very near approach to constancy in the conjoint forces of the earth and of the needle. But the combined evidence of the Magnetometer observations and of the times of *horizontal* vibration has shown, that throughout this whole period the needle was losing force, and therefore the earth must have gained the force which the needle lost,—or the times of vertical vibration would not have approached so nearly to constancy. The times of vertical vibration are therefore in accordance with those of horizontal vibration, in manifesting that the Vertical Force of the earth was increasing from 1844 to 1848; though, for many reasons, they are less suited than the times of horizontal vibration to give, by their combination with the Magnetometer observations, a satisfactory result in regard to the *rate* of increase.

It is much to be desired that the subject which has been here considered should receive a further elucidation by the continuance of observations of the same kind at the Toronto Observatory, which has now passed into the hands of a provincial administration, and retains the instruments with which the valuable observations which have now been discussed were made. To these the method since devised by Dr. Lloyd for the absolute determination of the Vertical Force and of its variations from time to time,—and of the Total Force and its variations,—by *direct* observation, would be an important auxiliary. It is a research which might also well repay the Directors of the Harvard College Observatory in Cambridge, in the United States, should they think fit to resume their magnetical observations, which commenced with such good promise, but were too soon abandoned.

It has been conceived that the progressive approach of the minor maximum of the force, now in the eastern part of Siberia and moving towards America, should augment the force at the American maximum, and that consequently the force at the American maximum ought at the present epoch to be increasing. If this supposition be correct, the observed increase of the total force at Toronto may be a consequence of the general increase of the total force in the vicinity of the American maximum, from the nearer approach of the two points of maxima to each other; or it may be a consequence of a systematic movement of translation of the isodynamic lines in the same vicinity;

or it may be due in part to each of these causes. The solution of such questions, which are of the first importance in relation to the secular change which the general magnetic condition of the earth is undergoing, seems imperatively to require the employment of cotemporaneous or nearly cotemporaneous observations at more than one locality in the region surrounding the maximum. In this respect Toronto is at present unaided: there is, indeed, a Magnetic Observatory at Sitka, on the north-west side of the American continent; but, unfortunately, we are not supplied by it with corresponding observations to those which have been here discussed, as the central Observatory at St. Petersburg did not succeed in constructing a Vertical Force Magnetometer. Amongst the British possessions in that quarter of the globe, perhaps Newfoundland presents practically the most eligible site for a Magnetic Observatory to be maintained in action for at least five or six years.

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

The second volume of the Toronto Observations contains, in pp. 595—633, a detailed statement of the monthly observations made with the Unifilar Magnetometer to determine the value of the Horizontal Force in absolute measure, and its annual and secular variations. In the reference made to those observations in the early part of the same volume, pp. lxxxix and xc, it is stated that "as *absolute* determinations the results can only yet be considered as provisional, as the exact values of the distances between the centres of the suspended and deflecting magnets, and of the constants of inertia and of induction, will have to be finally determined with the new standard scale and weights on the return of the Unifilar to England."

Since the publication of that volume, the Unifilar has been brought back to Woolwich, and the graduation of its scale has been compared by Mr. Welsh, of the Kew Observatory of the British Association, with a certified copy of the British standard scale belonging to that observatory. The weight and dimensions of the two rings, employed at Toronto to determine the moment of inertia of the deflecting magnet and the stirrup in which it was suspended during the vibration-observations, have also been examined by Mr. Welsh, and their values assigned in terms of authenticated copies of the British standards of weight and measure.

Mr. Welsh's memorandum of the result of his measurements is as follows:—

*Measurement of the Distance-arms of the Unifilar of the Toronto Observatory,
and of the Half-length of the Magnet.*

Distance of the point, 1 foot, on the one arm, to the point, 1 foot, on the other arm, = 23·960 inches at 62°.

The two arms are not in this instrument of one continuous piece of metal; it is therefore necessary in this case to consider the error of the distance as a constant error at all distances. It appears, therefore, that all the observed distances should be corrected by — 0·001666 foot.

The half-length of the magnet I. 18 = 0·1526 of a foot, with a probable error arising from irregularity of figure of $\pm 0\cdot0001$ foot.

Dimensions of the Inertia Rings employed at the Toronto Observatory.

Ring No. 1.

Weight, 288·900 grains; external diameter, 2·9886 inches at 62°; internal diameter, 2·6097 inches at 62°.

Ring No. 3.

Weight, 358·462 grains; external diameter, 3·6472 inches at 62°; internal diameter, 3·2626 inches at 62°.

Kew Observatory, May 1856.

J. WELSH.

1. In respect to the deflection distances. In different experiments the near end of the deflecting magnet was placed at 1·0 ft., 1·1 ft., 1·2 ft., and occasionally at 1·3 ft. from the centre of the suspended magnet, as measured on the graduated arms of the Unifilar; corresponding by Mr. Welsh's memorandum to 0·9983 ft., 1·0983 ft., 1·1983 ft., and 1·2983 ft. of British measure at 62° Fahrenheit. To these must be added in each case half the length of the deflecting magnet, making the deflection distances in the different experiments respectively 1·1509 ft., 1·2509 ft., 1·3509 ft., and 1·4509 ft. On reference to Vol. II. p. 634, it will be seen that these differ only ·0001 in each case from the distances as measured by Captain Lefroy at Toronto in 1851, and employed by Captain Younghusband in computing the values of $\frac{m}{X}$ in pp. 593–633, except that the temperature of the scale on which the measurements were made by Captain Lefroy at Toronto was 50° Fahrenheit, and in Mr. Welsh's measurements 62° Fahrenheit. These differences are so minute, that it has not been considered expedient to make any alterations in the values of $\frac{m}{X}$ as computed by Captain Younghusband.

2. The weight and dimensions of the inertia rings as determined by Mr. Welsh, do not harmonize quite so well with the memorandum which accompanied the rings when sent to Toronto by their maker, Mr. William Jones, of Rupert Street; and it has therefore been necessary to recompute the moment of inertia of the deflecting magnet with the stirrup in which it was placed for the experiments of vibration. Employing Mr. Welsh's measurements, K , the moment of inertia of the ring, = 3·94785 for ring 1, and 7·45135 for ring 3. Substituting these values for 3·93024 and 7·43213, derived from previous measures, and employed by Captain Younghusband in calculating the log. value of $\pi^2 = 1·6558266$ as given in the memorandum in Vol. II. p. 634, we obtain the corrected log. values, viz. 1·65724 by ring 1, and 1·65748 by ring 3; and by the mean of the two rings, 1·65736. The values of T^2 and T^1 (the times of vibration of the magnet with and without the rings) employed by Captain Younghusband were obtained by three experiments of vibration with the large ring, three with the small ring, and three with the magnet alone, made in the autumn of 1845.

The results of the whole series, thus finally computed, are given in the following table:—

TABLE LXXIII.

Abstract of the Monthly Determinations of the Horizontal Force in absolute Measure.—The "Times of Vibration" are corrected for the Torsion of the Suspension Thread and the Rate of the Chronometer, and are reduced to an uniform Temperature of 50°, and to the Mean Bifilar Reading on the Day of Observation. The Values of $\frac{m}{X}$ are obtained from the Distances and from the Angles of Deflection stated in detail in Vol. II. pp. 596—632. The Angles of Deflection are reduced to the same uniform Temperature as the Times of Vibration, and to the Mean Bifilar Reading on the Day of Observation.

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).
			m X.	$\frac{m}{X}$	
1845:	<i>s.</i>				
January 15	-	1	0·29249	9·19304	3·5460
" 16	-	1	0·29260	9·19230	3·5491
" 17	-	1	0·29170	9·19216	3·5463
February 14	-	1	0·29154	9·19245	3·5444
" 15	-	1	0·29239	9·19295	3·5459
" 17	-	1	0·29286	9·19217	3·5510
March 14	-	1	0·29194	9·19243	3·5462
" 15	-	1	0·29171	9·19174	3·5480
April 14	-	1	0·28658	9·18782	3·5431
" 15	-	1	0·28646	9·18755	3·5437
" 16	-	1	0·28680	9·18705	3·5471

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units)			
			<i>m</i> X.	<i>m</i> X				
1845:								
May	13	-	4°8485	1	0°28615	9°18692	3°5450	3°5481
"	14	-	4°8469	1	0°28644	9°18578	3°5569	
"	15	-	4°8501	1	0°28587	9°18578	3°5485	
June	14	-	4°8489	1	0°28608	9°18619	3°5477	3°5514
"	16	-	4°8501	1	0°28587	9°18504	3°5515	
"	17	-	4°8486	1	0°28613	9°18444	3°5550	
July	14	-	4°8553	1	0°28493	9°18431	3°5507	3°5508
"	15	-	4°8631	1	0°28354	9°18283	3°5511	
"	16	-	4°8654	1	0°28313	9°18255	3°5505	
August	15	-	4°8671	1	0°28283	9°18287	3°5480	3°5473
"	16	-	4°8722	1	0°28192	9°18213	3°5473	
"	18	-	4°8750	1	0°28142	9°18182	3°5465	
September	16	-	4°9164	2	0°27407	9°17412	3°5479	3°5466
"	17	-	4°9194	2	0°27354	9°17408	3°5460	
"	18	-	4°9199	1	0°27345	9°17422	3°5452	
October	14	-	4°9027	1	0°27650	9°17740	3°5445	3°5466
"	15	-	4°9042	1	0°27623	9°17657	3°5467	
"	16	-	4°9020	1	0°27662	9°17653	3°5485	
November	13	-	4°9053	1	0°27604	9°17598	3°5484	3°5471
"	14	-	4°9118	1	0°27189	9°17490	3°5481	
"	15	-	4°9141	1	0°27448	9°17530	3°5448	
December	15	-	4°9427	1	0°26943	9°16995	3°5461	3°5479
"	16	-	4°9488	1	0°26836	9°16974	3°5425	
"	17	-	5°0321	1	0°25386	9°15118	3°5468	
"	18	-	5°0171	1	0°25645	9°15450	3°5592	
1846:								
January	14	-	5°0083	2	0°25798	9°15778	3°5490	3°5475
"	15	-	5°0145	2	0°25690	9°15656	3°5495	
"	16	-	5°0227	1	0°25548	9°15614	3°5454	
"	17	-	5°0204	1	0°25588	9°15692	3°5439	3°5413
"	22	-	5°0215	1	0°25569	9°15623	3°5460	
February	14	-	5°0145	2	0°25691	9°15898	3°5399	
"	16	-	5°0153	2	0°25675	9°15842	3°5414	3°5411
"	17	-	5°0172	2	0°25644	9°15780	3°5426	
March	14	-	5°0498	2	0°25081	9°15275	3°5403	
"	16	-	5°0454	2	0°25158	9°15297	3°5424	3°5414
"	17	-	5°0530	2	0°25026	9°14999	3°5493	
"	18	-	5°0602	2	0°24902	9°14994	3°5411	
April	15	-	5°0795	2	0°24572	9°14702	3°5428	3°5414
"	17	-	5°0802	2	0°24560	9°14706	3°5422	
"	18	-	5°0824	2	0°24525	9°14742	3°5392	
May	13	-	5°0825	2	0°24520	9°14668	3°5421	3°5414
"	14	-	5°0840	2	0°24495	9°14687	3°5403	
"	16	-	5°0827	2	0°24517	9°14670	3°5419	
June	16	-	5°0854	2	0°24471	9°14536	3°5455	3°5459
"	17	-	5°0856	2	0°24467	9°14540	3°5452	
"	18	-	5°0859	2	0°24462	9°14498	3°5467	
July	14	-	5°0910	2	0°24375	9°14418	3°5452	3°5456
"	15	-	5°0922	2	0°24355	9°14483	3°5429	
"	16	-	5°0918	2	0°24362	9°14420	3°5458	

ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			m X	$\frac{m}{X}$				
1846:								
August	13	-	5'1016	2	0'24194	9'14382	3'5405	3'5397
"	14	-	5'1030	2	0'24171	9'14366	3'5401	
"	15	-	5'1040	2	0'24154	9'14392	3'5384	
September	14	-	5'1144	2	0'23977	9'14246	3'5372	3'5390
"	15	-	5'1115	2	0'24026	9'14234	3'5397	
"	16	-	5'1110	2	0'24035	9'14228	3'5402	
October	12	-	5'1170	2	0'23933	9'14165	3'5387	3'5386
"	13	-	5'1169	2	0'23934	9'14197	3'5374	
"	14	-	5'1163	2	0'23945	9'14149	3'5398	
November	16	-	5'1177	1	0'23921	9'14028	3'5438	3'5360
"	17	-	5'1180	2	0'23916	9'14229	3'5354	
"	18	-	5'1209	2	0'23866	9'14245	3'5327	
December	15	-	5'1196	2	0'23889	9'14058	3'5412	3'5433
"	16	-	5'1182	2	0'23914	9'14006	3'5444	
"	17	-	5'1174	2	0'23926	9'14021	3'5443	
1847:								
January	18	-	5'1261	2	0'23778	9'13899	3'5432	3'5435
"	19	-	5'1240	2	0'23814	9'13881	3'5454	
"	20	-	5'1266	2	0'23770	9'13916	3'5422	
"	21	-	5'1234	2	0'23824	9'13943	3'5432	3'5426
February	15	-	5'1283	1	0'23741	9'13888	3'5422	
"	16	-	5'1293	1	0'23724	9'13892	3'5413	
"	17	-	5'1280	1	0'24746	9'13920	3'5410	3'5426
"	18	-	5'1237	1	0'23819	9'13865	3'5463	
"	19	-	5'1281	1	0'23744	9'13884	3'5424	
March	15	-	5'1323	1	0'23673	9'13993	3'5352	3'5386
"	16	-	5'1286	1	0'23736	9'13903	3'5413	
"	17	-	5'1312	1	0'23692	9'13919	3'5389	
"	18	-	5'1305	1	0'23704	9'13926	3'5391	3'5348
April	14	-	5'1331	2	0'23660	9'13927	3'5373	
"	15	-	5'1338	2	0'23648	9'13935	3'5365	
"	16	-	5'1344	2	0'23638	9'14041	3'5318	3'5386
"	19	-	5'1345	1	0'23636	9'13995	3'5335	
May	15	-	5'1312	2	0'23692	9'13870	3'5409	
"	17	-	5'1358	2	0'23614	9'13939	3'5349	3'5392
"	19	-	5'1315	2	0'23687	9'13906	3'5392	
"	20	-	5'1329	2	0'23663	9'13879	3'5394	
June	15	-	5'1306	1	0'23702	9'13911	3'5396	3'5399
"	16	-	5'1341	2	0'23643	9'13857	3'5395	
"	17	-	5'1328	2	0'23665	9'13894	3'5388	
"	18	-	5'1298	2	0'23716	9'13875	3'5417	3'5366
July	14	-	5'1388	3	0'23563	9'13886	3'5350	
"	15	-	5'1387	3	0'23565	9'13816	3'5379	
"	16	-	5'1412	2	0'23523	9'13803	3'5368	3'5424
August	17	-	5'1413	2	0'23521	9'13646	3'5431	
"	18	-	5'1413	2	0'23521	9'13675	3'5419	
"	19	-	5'1438	2	0'23480	9'13624	3'5423	3'5338
September	15	-	5'1516	2	0'23347	9'13607	3'5335	
"	16	-	5'1550	2	0'23290	9'13644	3'5337	
"	17	-	5'1529	2	0'23325	9'13653	3'5348	

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—continued.

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).
			m X.	$\frac{m}{X}$.	
1847 :	s.				
October 16	-	2	0'23300	9'13573	3'5370
" 18	-	2	0'23255	9'13591	3'5344
" 19	-	2	0'23243	9'13622	3'5327
" 20	-	2	0'23249	9'13587	3'5340
November 16	-	2	0'23246	9'13550	3'5357
" 17	-	2	0'23246	9'13540	3'5362
" 18	-	2	0'23263	9'13518	3'5378
December 16	-	2	0'23228	9'13469	3'5384
" 18	-	2	0'23123	9'13539	3'5313
" 21	-	2	0'23025	9'13573	3'5258
" 24	-	2	0'23145	9'13263	3'5434
1848 :					
January 17	-	2	0'23060	9'13488	3'5307
" 18	-	2	0'23103	9'13505	3'5320
" 19	-	2	0'23142	9'13443	3'5359
February 16	-	1	0'23117	9'13438	3'5350
" 17	-	2	0'23117	9'13427	3'5355
" 18	-	2	0'23113	9'13405	3'5363
" 19	-	2	0'23102	9'13453	3'5339
March 13	-	2	0'23167	9'13387	3'5392
" 14	-	2	0'23177	9'13433	3'5378
" 15	-	2	0'23115	9'13450	3'5345
April 17	-	2	0'23108	9'13424	3'5352
" 18	-	2	0'23102	9'13392	3'5363
" 19	-	2	0'23140	9'13418	3'5368
May 15	-	2	0'23142	9'13361	3'5392
" 16	-	2	0'23162	9'13383	3'5391
" 17	-	2	0'23184	9'13418	3'5374
June 15	-	2	0'23091	9'13379	3'5365
" 16	-	2	0'23117	9'13415	3'5360
" 17	-	2	0'23125	9'13394	3'5372
July 18	-	2	0'23060	9'13305	3'5382
" 19	-	2	0'23117	9'13318	3'5399
" 20	-	2	0'23020	9'13348	3'5348
August 15	-	2	0'22716	9'13062	3'5340
" 16	-	2	0'22804	9'13056	3'5379
" 17	-	2	0'22741	9'13026	3'5366
" 18	-	2	0'22761	9'13073	3'5355
September 15	-	1	0'22615	9'12982	3'5332
" 16	-	2	0'22651	9'12989	3'5345
" 19	-	2	0'22605	9'13004	3'5319
October 17	-	2	0'22517	9'12909	3'5321
" 19	-	2	0'22387	9'13024	3'5222
" 20	-	2	0'22322	9'12982	3'5213
" 21	-	2	0'22518	9'12972	3'5296
November 21	-	2	0'22388	9'12932	3'5260
" 22	-	2	0'22348	9'12915	3'5251
" 23	-	2	0'22313	9'12921	3'5235
December 19	-	2	0'22503	9'12896	3'5322
" 20	-	2	0'22498	9'12904	3'5316
" 21	-	2	0'22462	9'12869	3'5316

TABLE LXXIII.—*continued*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			m X	m X				
1849 :								
January	15	-	5°2095	2	0°22377	9°12877	3°5278	3°5319
"	16	-	5°2058	2	0°22438	9°12784	3°5340	
"	17	-	5°2054	2	0°22445	9°12798	3°5338	
February	17	-	5°2071	2	0°22417	9°12778	3°5334	3°5312
"	19	-	5°2106	2	0°22358	9°12761	3°5317	
"	20	-	5°2127	2	0°22323	9°12805	3°5286	
March	19	-	5°2065	2	0°22427	9°12747	3°5351	3°5339
"	20	-	5°2089	2	0°22387	9°12764	3°5328	
"	21	-	5°2067	2	0°22423	9°12769	3°5341	
April	19	-	5°1998	2	0°22537	9°12721	3°5407	3°5378
"	20	-	5°2013	2	0°22513	9°12691	3°5410	
"	21	-	5°2153	2	0°22280	9°12678	3°5319	
May	16	-	5°2052	2	0°22418	9°12587	3°5425	3°5413
"	17	-	5°2036	2	0°22475	9°12690	3°5394	
"	18	-	5°2036	2	0°22475	9°12692	3°5422	
June	18	-	5°2105	2	0°22360	9°12541	3°5407	3°5389
"	19	-	5°2058	2	0°22438	9°12551	3°5436	
"	20	-	5°2187	2	0°22223	9°12608	3°5325	
July	17	-	5°2040	2	0°22468	9°12470	3°5480	3°5428
"	18	-	5°2116	2	0°22342	9°12486	3°5423	
"	19	-	5°2147	2	0°22290	9°12538	3°5380	
August	16	-	5°2218	2	0°22172	9°12378	3°5397	3°5394
"	17	-	5°2193	2	0°22213	9°12386	3°5411	
"	18	-	5°2224	2	0°22162	9°12424	3°5375	
September	19	-	5°2285	2	0°22060	9°12375	3°5353	3°5382
"	20	-	5°2282	2	0°22065	9°12319	3°5378	
"	21	-	5°2242	2	0°22132	9°12293	3°5416	
October	15	-	5°2349	2	0°21954	9°12332	3°5328	3°5343
"	17	-	5°2329	2	0°21987	9°12341	3°5338	
"	18	-	5°2315	2	0°22010	9°12294	3°5366	
November	16	-	5°2343	2	0°21964	9°12270	3°5357	3°5366
"	17	-	5°2319	2	0°22004	9°12267	3°5374	
"	19	-	5°2316	2	0°22009	9°12295	3°5365	
December	18	-	5°2396	2	0°21876	9°12223	3°5340	3°5351
"	19	-	5°2370	2	0°21919	9°12203	3°5366	
"	20	-	5°2388	2	0°21890	9°12215	3°5349	
1850 :								
January	16	-	5°2390	2	0°21886	9°12222	3°5344	3°5344
"	17	-	5°2388	2	0°21890	9°12159	3°5372	
"	18	-	5°2423	2	0°21831	9°12236	3°5317	
February	16	-	5°2450	2	0°21820	9°12197	3°5328	3°5354
"	18	-	5°2383	2	0°21898	9°12200	3°5358	
"	19	-	5°2405	2	0°21867	9°12119	3°5377	
March	18	-	5°2379	2	0°21804	9°12181	3°5369	3°5387
"	19	-	5°2337	2	0°21974	9°12142	3°5425	
"	20	-	5°2407	2	0°21858	9°12136	3°5368	
April	17	-	5°2400	2	0°21870	9°12121	3°5379	3°5373
"	18	-	5°2407	2	0°21858	9°12141	3°5366	
"	19	-	5°2397	2	0°21875	9°12122	3°5380	

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—continued.

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			$m \times$	$\frac{m}{X}$				
1850:								
May	18	-	5'2396	2	0'21876	9'12159	3'5566	3'5366
"	20	-	5'2416	2	0'21843	9'12122	3'5564	
"	21	-	5'2410	2	0'21853	9'12140	3'5565	
June	17	-	5'2454	2	0'21780	9'12093	3'5554	3'5380
"	18	-	5'2425	2	0'21828	9'11995	3'5414	
"	19	-	5'2491	2	0'21720	9'11981	3'5375	
July	16	-	5'4446	2	0'18542	9'09060	3'5270	3'5284
"	17	-	5'4443	2	0'18547	9'09043	3'5280	
"	18	-	5'4479	2	0'18490	9'08928	3'5303	
August	16	-	5'4543	2	0'18388	9'09097	3'5193	3'5199
"	17	-	5'4531	2	0'18407	9'09101	3'5200	
"	19	-	5'4492	2	0'18470	9'09149	3'5205	
September	16	-	5'4540	2	0'18393	9'09037	3'5220	3'5217
"	17	-	5'4522	2	0'18421	9'09051	3'5226	
"	18	-	5'4534	2	0'18402	9'09077	3'5207	
October	15	-	5'4554	2	0'18370	9'08771	3'5317	3'5320
"	16	-	5'4553	2	0'18372	9'08790	3'5311	
"	17	-	5'4508	1	0'18444	9'08782	3'5343	
November	19	-	5'4569	2	0'18347	9'08654	3'5356	3'5361
"	20	-	5'4529	2	0'18410	9'08664	3'5378	
"	21	-	5'4530	2	0'18409	9'08734	3'5348	
December	16	-	5'4606	2	0'18288	9'08722	3'5305	3'5283
"	17	-	5'4630	2	0'18250	9'08740	3'5282	
"	18	-	5'4667	2	0'18191	9'08733	3'5262	
1851:								
January	15	-	5'4622	2	0'18262	9'08684	3'5310	3'5249
"	16	-	5'4772	2	0'18024	9'08748	3'5187	
"	17	-	5'4693	2	0'18150	9'08721	3'5249	
February	17	-	5'4639	2	0'18235	9'08608	3'5330	3'5243
"	18	-	5'4768	2	0'18030	9'08751	3'5188	
"	19	-	5'4760	2	0'18043	9'08711	3'5210	
March	17	-	5'4643	2	0'18229	9'08620	3'5322	3'5321
"	18	-	5'4626	2	0'18256	9'08697	3'5302	
"	19	-	5'4622	2	0'18262	9'08609	3'5340	
April	15	-	5'4650	2	0'18218	9'08606	3'5323	3'5311
"	16	-	5'4652	2	0'18215	9'08593	3'5327	
"	17	-	5'4691	2	0'18153	9'08636	3'5284	
May	15	-	5'4638	2	0'18237	9'08570	3'5345	3'5328
"	16	-	5'4627	2	0'18254	9'08596	3'5342	
"	17	-	5'4692	2	0'18151	9'08605	3'5297	
June	17	-	5'4444	2	0'18546	9'08915	3'5331	3'5311
"	18	-	5'4501	2	0'18455	9'08868	3'5313	
"	19	-	5'4506	2	0'18447	9'08922	3'5288	
July	15	-	5'4515	2	0'18433	9'08897	3'5292	3'5317
"	16	-	5'4490	2	0'18472	9'08838	3'5332	
"	17	-	5'4518	2	0'18428	9'08802	3'5329	
August	15	-	5'4561	2	0'18359	9'08786	3'5308	3'5318
"	16	-	5'4547	2	0'18332	9'08851	3'5291	
"	18	-	5'4535	2	0'18401	9'08706	3'5337	

TABLE LXXIII.—continued.

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).		
			m X	m X			
1851 :							
September 16	-	5°4611	2	0°18280	9°08730	3°5298	3°5286
" 17	-	5°4638	2	0°18237	9°08749	3°5274	
" 18	-	5°4632	2	0°18246	9°08725	3°5287	
October 16	-	5°4660	2	0°18202	9°08640	3°5303	3°5311
" 17	-	5°4632	2	0°18246	9°08636	3°5322	
" 18	-	5°4644	2	0°18227	9°08650	3°5309	
November 17	-	5°4864	2	0°17878	9°08352	3°5288	3°5304
" 18	-	5°4843	2	0°17912	9°08331	3°5311	
" 19	-	5°4820	2	0°17948	9°08362	3°5313	
December 15	-	5°4860	2	0°17885	9°08340	3°5296	3°5286
" 16	-	5°4863	2	0°17880	9°08346	3°5292	
" 18	-	5°4893	2	0°17832	9°08351	3°5270	
1852 :							
January 16	-	5°4886	2	0°17844	9°08271	3°5307	3°5305
" 17	-	5°4812	2	0°17960	9°08329	3°5332	
" 19	-	5°4911	2	0°17804	9°08293	3°5276	
February 17	-	5°5062	2	0°17565	9°08146	3°5246	3°5231
" 19	-	5°5074	1	0°17546	9°08184	3°5222	
" 23	-	5°5106	2	0°17496	9°08127	3°5225	
" 24	-	5°5105	2	0°17498	9°08127	3°5226	3°5237
March 15	-	5°5125	2	0°17466	9°08116	3°5217	
" 16	-	5°5120	2	0°17474	9°08066	3°5240	
" 17	-	5°5097	2	0°17510	9°08095	3°5244	3°5054
April 16	-	5°5022	2	0°17628	9°08763	3°5021	
" 17	-	5°4969	2	0°17712	9°08716	3°5074	
" 19	-	5°5005	2	0°17655	9°08676	3°5067	3°5142
May 17	-	5°4956	2	0°17733	9°08534	3°5156	
" 18	-	5°4955	2	0°17731	9°08556	3°5148	
" 19	-	5°5003	2	0°17658	9°08566	3°5112	3°5083
June 16	-	5°5038	2	0°17603	9°08647	3°5058	
" 17	-	5°5008	2	0°17651	9°08628	3°5084	
" 18	-	5°5023	2	0°17627	9°08551	3°5107	3°5139
July 16	-	5°5033	2	0°17611	9°08505	3°5120	
" 17	-	5°5021	2	0°17630	9°08488	3°5133	
" 19	-	5°5022	2	0°17628	9°08462	3°5142	3°5138
August 16	-	5°5078	2	0°17540	9°08463	3°5107	
" 17	-	5°5044	2	0°17594	9°08422	3°5145	
" 18	-	5°5018	2	0°17635	9°08463	3°5162	3°5119
September 16	-	5°5251	2	0°17268	9°08116	3°5137	
" 17	-	5°5267	2	0°17243	9°08140	3°5117	
" 18	-	5°5262	2	0°17250	9°08185	3°5102	3°5110
October 16	-	5°5282	2	0°17219	9°08114	3°5118	
" 18	-	5°5287	2	0°17211	9°08164	3°5095	
" 19	-	5°5283	2	0°17218	9°08118	3°5116	3°5140
November 18	-	5°5306	2	0°17181	9°08058	3°5125	
" 19	-	5°5262	2	0°17250	9°08057	3°5154	
" 20	-	5°5286	2	0°17213	9°08046	3°5142	3°5149
December 16	-	5°5270	2	0°17238	9°08020	3°5163	
" 17	-	5°5322	2	0°17156	9°07999	3°5139	
" 18	-	5°5303	2	0°17186	9°08016	3°5144	

There is still another correction to be applied to these results, which could not be determined until the return of the Unifilar, at the close of the series, to Woolwich, where in the meantime an apparatus had been prepared for the purpose of ascertaining its amount. The necessity for this correction was first pointed out by Dr. Lamont in Dove's Repertorium, Band 7 (1846). In the experiments for measuring the absolute values of the Horizontal Force two operations are required; viz., experiments of vibration, and experiments of deflection: in the experiments of vibration the magnet is in the magnetic meridian; in those of deflection it forms with that meridian an angle which is in all cases considerable. But as it has been found that the earth elicits a sensible degree of magnetism by induction in hardened and magnetized iron or steel, it follows that when placed in the magnetic meridian a magnet is stronger than when it is perpendicular to or forms an angle with the meridian. In the usual mode of computing the results deducible from the combination of the vibration and deflection experiments, the strength of the magnet which is vibrated in the one case and used as a deflector in the other, is assumed to be the same, which, however, is not strictly true, for the reason which has been assigned; hence the necessity of the correction to which has been given, not inappropriately, the name of the induction-correction. As its value depends on the capacity of the individual magnet to receive a greater or less inductive charge, it requires, like the temperature-correction, to be determined for the particular magnet which has been employed, which in this case was I. 18 throughout the whole series. The apparatus made for this purpose at Woolwich was similar in principle to Dr. Lamont's, described in Dove's Repertorium, Band 7, and was adapted to one of the ordinary portable Unifilars: it has now been transferred to the Kew Observatory, where it will in future be employed to determine this amongst the other constants of the magnetic instruments supplied through that observatory. I am indebted to Mr. Welsh for the following memorandum of the correction to be applied to the Toronto results, which he has determined by using I. 18 in this apparatus.

Determination of the Induction Coefficient for the Deflecting Magnet I. 18 employed at the Toronto Observatory, 1845—1852.

The experiments have been made with the Woolwich induction apparatus by the method of Dr. Lamont.

Let μ = the magnetic moment induced in the bar by the action of a magnetic force equal to unity of the English measure.

M = moment of permanent magnetism of the bar at the time of making the experiments for the induction coefficient.

X , = horizontal component of the earth's magnetic force at the time and place of the experiments.

i = magnetic dip at the same time and place.

z = angle of deflection produced upon the freely suspended needle, the deflecting bar being placed vertical with the north end *downwards*.

z' = angle of deflection, north end *upwards*.

Then—

$$\mu = X \tan \frac{1}{2}(z - z') \tan \frac{1}{2}(z + z') ; \text{ or, } \mu = \frac{M_r}{X_r} \cdot \frac{\tan \frac{1}{2}(z - z')}{\tan i \tan \frac{1}{2}(z + z')}$$

The effect (in parts of the whole magnetic moment of the bar) of the inducing action of the Horizontal Force at any time and place is obtained from the equation,

$$\frac{\Delta m}{m} = \mu \cdot \frac{X}{m}$$

The following are the results of experiments made at the Kew Observatory, January 17 and 19, 1857:—

	January 17.	January 19.
	0 24 38.5	0 31 8.5
$\frac{1}{2}(z - z')$	46 50 6.0	52 39 2.0
$\frac{1}{2}(z + z')$	68 25 0.0	68 25 0.0
i		
$\text{Log } \frac{M_r}{X}$	8.99790	8.99790
μ	0.0002617	0.0002722
Mean value of μ	0.0002685	

Hence we have for the different values of $\frac{m}{X}$ in Table LXXIII., values of $\frac{\Delta m}{m}$ ranging from 0.00173 to 0.00223; and taking the mean angle of deflection in the Table of the Toronto Observations, Vol. II. pp. 596—633, at $7^{\circ}5$, the induction-correction applicable to X varies from -0.0035 in the experiments of 1845 to -0.0044 in those of 1852.

Kew Observatory, January 20, 1857.

J. WELSH.

MAGNETIC INCLINATION.

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We obtain, therefore, from Table LXXIII. the following finally corrected values of the absolute Horizontal Force in the several years from 1845 to 1852:—

TABLE LXXIV.

Years.	Annual Means from Table LXXIII.	Annual Means corrected for Induction.	Years.	Annual Means from Table LXXIII.	Annual Means corrected for Induction.
1845	3'5478	3'5443	1849	3'5368	3'5328
1846	3'5419	3'5381	1850	3'5322	3'5280
1847	3'5391	3'5342	1851	3'5299	3'5255
1848	3'5339	3'5299	1852	3'5154	3'5110

From the annual means corrected for induction we obtain 3'5305 as the absolute Horizontal Force corresponding to the mean epoch of the table, January 1st 1849; and $-.00371 \div .00091$ as the mean annual secular change between 1845 and 1852 inclusive. The probable error of a single annual mean is $\pm .0026$; a large proportion of which is due to the observations of 1852, which I have not felt at liberty wholly to omit, as no accidental cause has been stated to be known for their apparent irregularity.

MAGNETIC INCLINATION.

The first volume of the Toronto Observations contained, in pp. 328—332, a detailed statement of the observations of the Inclination made monthly from January 1841 to December 1842 inclusive; the second volume contained, in pp. 559—594, a similar record of the continuation of the series from January 1843 to December 1852 inclusive. The second volume contained also, in pp. lxxxv—lxxxix, a discussion of the results obtained during those years. I have since been favoured by Mr. Kingston, Director of the Toronto Observatory since it has become a provincial establishment, with a continuation of the series during the years 1853, 1854, and 1855, conducted upon the previous model, of which the following is an abstract:—

TABLE LXXV.

Observations of Inclination continued from Vol. II., page 594. Needle employed, Gumbey, No. 1.

1853.	75° +	Monthly Means.	1854.	Poles.		Monthly Means.	1855.	Poles.		Monthly Means.
				Direct. 75° +	Reversed. 75° +			Direct. 75° +	Reversed. 75° +	
Jan. 17	22° 1'	75° 22' 06"	Jan. 16	25° 5'	17° 1'	75° 21' 4"	Jan. 15	30° 8'	16° 4'	75° 24' 0"
"	22° 0'		"	25° 0'	18° 7'		"	32° 5'	15° 8'	
"	20° 4'		17	25° 2'	16° 6'		16	29° 0'	18° 6'	
"	20° 3'		"	25° 2'	16° 6'		"	28° 4'	20° 4'	
18	22° 2'		18	25° 7'	17° 1'	75° 23' 4"	17	29° 0'	19° 1'	75° 23' 8"
"	22° 4'		"	26° 1'	18° 1'		"	29° 1'	19° 5'	
"	22° 9'		Feb. 15	30° 1'	15° 5'		Feb. 15	29° 1'	17° 6'	
"	22° 4'		"	30° 2'	17° 6'		"	29° 7'	19° 5'	
19	22° 5'		16	29° 8'	16° 6'		16	27° 6'	20° 1'	75° 23' 8"
"	22° 7'		"	29° 3'	17° 5'		"	27° 2'	20° 4'	
"	22° 4'		17	27° 8'	18° 7'		17	28° 4'	20° 0'	
"	22° 5'		"	28° 5'	19° 1'		"	27° 0'	18° 9'	
Feb. 16	23° 0'	75° 22' 6"	Mar. 15	27° 3'	18° 3'		Mar. 19	30° 9'	18° 8'	75° 23' 8"
"	22° 1'		"	25° 9'	20° 3'		"	29° 6'	18° 1'	
"	22° 6'		16	27° 8'	17° 4'		20	29° 4'	17° 7'	
"	22° 8'		"	27° 2'	19° 6'		"	28° 8'	18° 2'	
17	23° 4'		17	27° 9'	18° 8'	75° 23' 0"	21	29° 3'	17° 4'	75° 23' 0"
"	23° 1'		"	27° 6'	18° 5'		"	29° 7'	17° 4'	
"	22° 0'		April 17	27° 8'	19° 2'		April 16	28° 4'	18° 2'	
"	22° 6'		"	28° 0'	18° 6'		"	28° 7'	17° 8'	
18	21° 8'		18	28° 3'	16° 4'		17	28° 2'	18° 2'	75° 23' 0"
"	22° 4'		"	24° 8'	20° 3'		"	27° 6'	18° 5'	
"	22° 8'		19	28° 2'	18° 8'		18	27° 2'	17° 9'	
"	22° 6'		"	27° 9'	17° 2'		"	28° 1'	17° 7'	
March -	No observations.	75° 22' 6"	May 16	27° 5'	18° 2'		May 15	28° 2'	20° 4'	75° 23' 5"
April 8	23° 0'		"	27° 3'	18° 8'		"	26° 6'	20° 9'	
"	22° 2'		17	27° 8'	18° 7'	75° 23' 0"	16	29° 4'	17° 0'	
"	22° 6'		"	28° 3'	18° 1'		"	28° 8'	19° 4'	
May -	No observations.		18	27° 0'	17° 7'		17	28° 7'	16° 8'	75° 22' 9"
June 15	23° 2'		"	26° 6'	19° 5'		"	29° 5'	16° 6'	
16	22° 1'		June 15	26° 1'	18° 6'		June 18	27° 3'	17° 3'	
"	22° 7'		"	27° 6'	19° 2'		"	29° 4'	16° 7'	75° 22' 9"
17	22° 0'		16	26° 7'	19° 1'		19	27° 1'	17° 9'	
"	22° 5'		"	26° 8'	19° 1'		"	26° 7'	17° 7'	
July 18	21° 6'	75° 21' 5"	17	25° 3'	20° 3'		20	28° 1'	19° 7'	75° 23' 1"
"	21° 6'		"	28° 3'	18° 3'		"	27° 7'	19° 3'	
19	21° 5'		July 17	29° 4'	17° 5'		July 16	28° 4'	17° 9'	
"	21° 0'		"	23° 9'	23° 1'		"	25° 6'	20° 4'	75° 23' 1"
20	21° 7'		18	29° 1'	19° 9'	75° 24' 3"	17	27° 5'	18° 1'	
"	21° 5'		"	29° 3'	19° 8'		"	27° 5'	19° 1'	
Aug. 16	21° 0'		19	28° 0'	20° 6'		18	27° 6'	18° 9'	
"	20° 1'		"	27° 6'	23° 4'		"	27° 3'	19° 1'	75° 23' 8"
17	20° 0'		Aug. 16	26° 2'	21° 4'		Aug. 15	27° 4'	19° 6'	
"	20° 1'		"	26° 7'	22° 4'		"	26° 6'	19° 8'	
18	19° 9'		17	26° 8'	18° 6'	75° 23' 2"	16	27° 5'	20° 8'	75° 23' 8"
"	20° 4'		"	26° 8'	20° 1'		"	26° 7'	20° 7'	
Sept. 16	21° 4'		18	26° 3'	17° 6'		17	28° 6'	19° 0'	
"	20° 8'		"	25° 8'	19° 9'		"	28° 6'	21° 1'	

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TABLE LXXV.—*continued.*

1853.	75° +	Monthly Means.	1854.	Poles.		Monthly Means.	1855.	Poles.		Monthly Means.
				Direct, 75° +	Reversed, 75° +			Direct, 75° +	Reversed, 75° +	
Sept. 17	22'1	75° 21'7	Sept. 18	28'3	18'9	75° 23'4	Sept. 17	28'4	19'8	75° 24'5
" 18	21'7		" 19	28'2	19'0		" 18	29'4	19'6	
" 19	21'7		" 20	27'8	20'9		" 19	27'6	21'3	
Oct. 17	22'5	75° 22'4	" 21	27'2	20'3	75° 22'0	Oct. 15	26'9	23'9	75° 23'5
" 18	22'9		" 22	25'9	18'9		" 16	26'1	22'2	
" 19	22'5		" 23	27'0	18'4		" 17	27'5	21'0	
" 18	21'6	75° 23'0	Oct. 16	26'1	19'2	75° 22'2	Oct. 18	26'9	19'2	75° 23'3
" 19	22'9		" 17	25'4	18'7		" 19	30'0	15'4	
" 20	22'1		" 18	26'0	17'7		" 20	27'6	19'5	
*Nov. 16	22'7	75° 22'3	" 19	25'2	20'0	75° 23'9	" 21	26'7	22'0	75° 23'3
" 17	22'2		" 20	26'0	16'0		" 22	27'9	19'7	
" 18	23'0		" 21	26'3	16'9		" 23	27'2	19'8	
" 19	23'2	75° 22'3	Nov. 16	24'1	17'9	75° 23'9	Nov. 13	28'7	18'9	75° 23'3
" 20	23'2		" 17	28'0	16'1		" 14	26'3	19'8	
" 21	23'2		" 18	26'9	17'6		" 15	26'5	20'7	
Dec. 15	23'2	75° 22'3	" 19	28'4	17'4	75° 23'9	" 16	26'5	19'4	75° 23'3
" 16	22'5		" 20	26'9	17'3		" 17	26'2	19'3	
" 17	21'7		" 21	27'1	18'2		" 18	26'8	19'9	
" 18	22'6	75° 22'3	Dec. 18	31'0	15'4	75° 23'9	Dec. 18	27'4	19'9	75° 23'3
" 19	21'8		" 19	30'8	16'1		" 19	27'9	20'9	
" 20	22'5		" 20	28'3	19'4		" 20	27'5	17'3	
" 21	23'0	75° 22'3	" 21	33'1	17'7	75° 23'9	" 21	26'9	18'9	75° 23'3
" 22	23'0		" 22	28'7	18'3		" 22	25'9	20'0	
" 23	23'0		" 23	30'0	17'9		" 23	27'2	19'5	

The annual means are 75° 22'17, 75° 23'0, and 75° 23'55. Collecting the several annual means into one view, we have the following table:—

TABLE LXXVI.

Years.	Observed Inclination.	Years.	Observed Inclination.	Years.	Observed Inclination.
1841	75° 16'6	1846	75° 15'1	1851	75° 20'4
1842	75° 16'4	1847	75° 15'3	1852	75° 20'5
1843	75° 14'7	1848	75° 18'3	1853	75° 22'2
1844	75° 14'8	1849	75° 18'8	1854	75° 23'0
1845	75° 15'5	1850	75° 20'0	1855	75° 23'6

* Previous to the observations of November 1853 a new stone pillar was substituted for the original wooden one.

From these observations the Inclination appears to have reached an epoch of minimum between the years 1843 and 1844, or about the commencement of 1844; and from 1844 to 1855 to have increased at an average rate of $\frac{75^{\circ} 23' \cdot 6 - 75^{\circ} 14' \cdot 8}{11} = 0' \cdot 8$.

On this supposition we have the computed Inclination in each of the twelve years, with the deviations from the observed values, as follows:—

TABLE LXXVII.

Years.	Computed Inclination.	Computed—observed.	Years.	Computed Inclination.	Computed—observed.
1844	$75^{\circ} 14' \cdot 8$	0'0	1850	$75^{\circ} 19' \cdot 6$	-0'4
1845	$75^{\circ} 15' \cdot 6$	+0'1	1851	$75^{\circ} 20' \cdot 4$	-0'0
1846	$75^{\circ} 16' \cdot 4$	+1'3	1852	$75^{\circ} 21' \cdot 2$	+0'7
1847	$75^{\circ} 17' \cdot 2$	+1'9	1853	$75^{\circ} 22' \cdot 0$	-0'2
1848	$75^{\circ} 18' \cdot 0$	-0'3	1854	$75^{\circ} 22' \cdot 8$	-0'2
1849	$75^{\circ} 18' \cdot 8$	-0'0	1855	$75^{\circ} 23' \cdot 6$	-0'0

The probable error of a single annual determination computed from these twelve years is $\pm 0' \cdot 5$.

If we further suppose the epoch of minimum to have synchronized with the commencement of 1844, and that the same rate of secular change, but with an opposite sign, existed previously, we shall have the annual means for the three preceding years, with their deviations from the observed values, as follows:—

1841	-	-	$75^{\circ} 16' \cdot 3$	Computed—observed	-0'3
1842	-	-	$75^{\circ} 15' \cdot 5$	" "	-0'9
1843	-	-	$75^{\circ} 14' \cdot 7$	" "	0'0

This last supposition must of course be viewed as merely approximate in regard to the rate of the secular change before 1843; but on any other supposition than that of an epoch of minimum having occurred somewhere about the years 1843 and 1844, the probable error would greatly exceed that which is stated above. The value of the Inclination at the epoch of its supposed minimum is about $75^{\circ} 14' \cdot 4$. In the years immediately following the minimum, the annual increase was probably less, and in the latter portion of the twelve years greater, than the average rate of $0' \cdot 8$ derived as above.

The Gambey's Inclinator which has been used at Toronto since 1853 is rather a remarkable instrument, on account of the services it has rendered. It

is the property of Admiral Robert FitzRoy, who, when about to be employed on a voyage of survey and circumnavigation in H.M.S. "Beagle," purchased it from the maker. During that voyage, *i.e.* from 1831 to 1836 inclusive, it served for the determination of the Inclination at above 30 stations in different parts of the globe, the results of which were published in Vol. I. of the "Voyage of the 'Adventure' and 'Beagle,'" pp. 495—499. In 1837 it was lent by Captain FitzRoy to the writer of these pages, to be employed in determining the position and direction of the isoclinal lines in the magnetic survey of Great Britain, the report of which survey is published in the Transactions of the British Association for 1839. In 1842 it was again lent by Captain FitzRoy to Lieutenant (since Lieutenant-Colonel) Lefroy of the Royal Artillery, to be used in the magnetic survey of the British Possessions in North America, and served to determine the Inclination at above 100 stations between Canada and the Polar Sea. Since the completion of the North American Survey the Inclinator has remained, with Captain FitzRoy's permission, at the Toronto Observatory, and was occasionally used, in conjunction with Robinson's Inclinator belonging to the Observatory, in the observations previous to 1853; since 1853 it has been used uninterruptedly. It had originally two needles made by Gambey, and has since had two others, made by the late Mr. Robinson, whose dipping needles were scarcely, if at all, inferior to Gambey's. It has thus been, with few intermissions, in constant work for above a quarter of a century, during which time it has been exposed to travelling of all descriptions, and to climates of the most opposite character; and of its four needles one only is known to have suffered a slight deterioration. This speaks well both for the original instrument and for the care with which it has been treated. The observations in 1853, 1854, and 1855, of which the results only are given in Table LXXV., were all made on the same systematic plan as those of the preceding years, detailed in Vol. II., pp. 560—594, and may be referred to as a fair example of the precision which is attainable in such observations.

Solar-diurnal Variation.—In the early stage of the observations, and before experience had been obtained of the reliance to be placed on the conclusions from the combined Horizontal and Vertical Force observations, it was thought that some light might be thrown upon the solar-diurnal variation of the Inclination by dividing the *direct* observations of this element into two portions, one to be made in the forenoon and the other in the afternoon. We have since become aware that the solar-diurnal variation of the Inclination is deducible by the Horizontal Force and Vertical Force Magnetometer with much greater precision than it can be by direct observation with the Inclinator, and that the variation is thereby obtained not merely for two epochs in the 24 hours, such as the forenoon and afternoon, but for every hour of the 24. (See *ante*, p. xciii.) Still, as direct observations were made in the forenoons and

afternoons, agreeably to the directions issued, and were continued from the commencement of 1841 to the end of 1852, it may be proper to show the comparative results which were thus obtained in each year. They are as follow :—

TABLE LXXVIII.

Years.	A.M.	P.M.	Years.	A.M.	P.M.
	° ' "	° ' "		° ' "	° ' "
1841	75 16'68	75 17'20	1847	75 15'43	75 15'27
1842	75 16'94	75 15'69	1848	75 18'23	75 18'44
1843	75 15'15	75 14'35	1849	75 19'14	75 18'70
1844	75 15'33	75 14'31	1850	75 19'90	75 20'09
1845	75 15'31	75 15'76	1851	75 20'27	75 20'44
1846	75 15'21	75 15'09	1852	75 20'56	75 20'47

The mean of the A.M. results is $75^{\circ} 17' 35''$, and of the P.M. results $75^{\circ} 17' 15''$. On the average of the 12 years the A.M. results exceed the P.M. by $0' 2''$. This is in the same direction as, but somewhat less in amount than, the difference more satisfactorily shown by the combination of the Horizontal and Vertical Force observations. If we suppose 9 A.M. and 3 P.M. to be about the mean times corresponding to the A.M. and P.M. direct observations, the difference between them should have been nearer $0' 5''$ than $0' 2''$; but a discrepancy of this small amount is within the limits of the errors of observation by the direct method.

Annual Variation.—Table L. in Vol. II., p. lxxxvii, contains the several monthly values of the Inclination from 1841 to 1852 inclusive, arranged according to the respective months. The following Table (LXXIX.) contains the continuation of the aforesaid Table in Vol. II., for the subsequent years 1853, 1854, and 1855: the final column exhibits for each month a value which is the arithmetical mean of the results in that month in the 15 years.

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TABLE LXXIX.

Monthly Means of the Observations of the Inclination from January 1841 to December 1855 inclusive, continued from TABLE L., Vol. II., p. lxxxvii.

Months.	1853.	1854.	1855.	Means for each Month, 1841 to 1855 inclusive.
	75° +	75° +	75° +	
January - - -	22°1	21°4	24°0	75° 18'78
February - - -	22°6	23°4	23°8	75° 18'43
March - - -	22°6*	23°1	23°8	75° 18'17
April - - -	22°6	23°0	23°0	75° 18'33
May - - -	22°5*	23°0	23°5	75° 18'08
June - - -	22°5	22°9	22°9	75° 17'38
July - - -	21°5	24°3	23°1	75° 17'13
August - - -	20°3	23°2	23°8	75° 17'33
September - -	21°7	23°4	24°5	75° 19'09
October - - -	22°5	22°0	23°5	75° 19'09
November - -	23°0	22°2	23°3	75° 19'53
December - -	22°3	23°9	23°3	75° 19'15
Means for each year -	75° 22'2	75° 23'0	75° 23'6	75° 18'38

* The months of March and May of 1853 are interpolated values, as no observations were made in those months. For March, a mean has been taken between the results in February and April of the same year; and for May, a mean between the results in April and June.

On examining the final column, the existence of annual variation is very perceptible: the Inclination is considerably less in the middle months of the year than at its beginning or ending. But these results involve the effects of the secular change which takes place during the year, as well as those of annual variation. To eliminate the influence of secular change, perhaps the least exceptionable process is to take the arithmetical means, respectively, of January and December, February and November, March and October, April and September, May and August, June and July, of all which couples, or bi-monthly means, the 1st of July is the common mean epoch; if, therefore, there were no annual variation, these six means should be all alike. They are as follow:—

January and December	-	-	-	75° 18'96
February and November	-	-	-	75° 18'98
March and October	-	-	-	75° 18'63
April and September	-	-	-	75° 18'71
May and August	-	-	-	75° 17'70
June and July	-	-	-	75° 17'25

It appears therefore, as the result of fifteen years of careful observations, made throughout at the same spot, and according to the same systematic method, and comprising no less than 1,920 distinct absolute determinations, nearly equally distributed, and averaging, therefore, 128 for each of the twelve months,—and after the elimination of secular change,—that the Inclination is lower at Toronto in June and July than in the previous January and the succeeding December, by an amount which may be taken approximately at $1^{\circ}71$.

Annual Variation, Absolute Value, and Secular Change of the Total Force.—The mean values of the absolute Horizontal Force in the different months obtained in the eight years (1845 to 1852 inclusive, pp. cvi—cxv) are as follow :—

January	3°5326	December	3°5291	Mean, January and December	3°5309.
February	3°5310	November	3°5287	Mean, February and November	3°5299.
March	3°5329	October	3°5278	Mean, March and October	3°5303.
April	3°5296	September	3°5276	Mean, April and September	3°5286.
May	3°5324	August	3°5298	Mean, May and August	3°5311.
June	3°5323	July	3°5318	Mean, June and July	3°5321.

Combining these with the mean values of the Inclination in the different months in the preceding page, we have the values of the Total Force as follow :—

January and December	3°5309	× see 75°18'96"	= 13°9133	} 13°9194
February and November	3°5299	× see 75°18'98"	= 13°9254	
March and October	3°5303	× see 75°18'63"	= 13°9218	} 13°9191
April and September	3°5286	× see 75°18'71"	= 13°9164	
May and August	3°5311	× see 75°17'70"	= 13°9106	} 13°9091
June and July	3°5321	× see 75°17'25"	= 13°9076	

It appears therefore, as the result of 96 monthly determinations of the absolute Horizontal Force, and 180 monthly determinations of the Inclination, that the Total Magnetic Force is less at Toronto on the average of the months of June, July, August, and September, than on the average of the months of November, December, January, and February, by 0·01 in absolute measure, or about $\frac{1}{150}$ of its whole amount.

The mean of the eight years of observation of the absolute Horizontal Force (p. cxvii) is 3°53045, corresponding to the mean epoch of January 1, 1849; the contemporaneous value of the Inclination is 75°18'4"; whence we have 13°9188 as the absolute value of the Total Force at the same mean epoch. Or if, as some may deem preferable, we omit the observations of the Horizontal Force in 1852, which, from some unexplained cause, differ from the results of the preceding seven years by an amount which greatly exceeds the probable error of a single year as derived from those results, we have, at the mean epoch July 1, 1848,—for the absolute Horizontal Force 3°5332; for the Inclination (the mean of the same seven years) 75°17'63; and for the Total Force 13°9178. With the data furnished by the observations of those seven years, we have

the annual secular decrease of the Horizontal Force $\cdot 0026 \pm \cdot 0006$; and the secular increase of the Inclination $1' \cdot 0 \pm 0' \cdot 19$; the probable error of a single annual determination of the absolute Horizontal Force $\pm \cdot 0015$, and of the Inclination $0' \cdot 51$; and with the same data we obtain the absolute values of the Total Force, corresponding to July 1, 1845, $13 \cdot 9023$, and corresponding to July 1, 1851, $13 \cdot 9334$; showing intermediately an increase of $0 \cdot 0311$ in six years, or $\cdot 0052$ in one year. Both combinations, therefore, *i.e.* the Horizontal and Vertical Forces examined in pp. ciii—civ, and the Horizontal Force and Inclination examined here, concur in showing an annual increase as the secular change of the Total Force; and we may view the two combinations as being in effect very nearly equivalent to two independent determinations; because, although it is true that the secular change of the Horizontal Force enters into both, yet in its combination with that of the Vertical Force, no variation in its amount which can be regarded as any degree probable could be otherwise than insignificant in the deduction of the resulting secular change of the Total Force.

 SECULAR CHANGE OF THE MAGNETIC DECLINATION.

Volume II. of the Toronto Observations contains, in pp. 635—639, the particulars of the monthly observations, made from 1845 to 1851 inclusive, to determine the absolute values of the Declination by means of a Declinometer placed in a detached building appropriated to that object only. An abstract of these observations, with a statement of their results, is given in Table I. at the commencement of the same volume (pp. iii, iv); and the conclusion from the results in p. vi. The value of the Declination at the mean epoch July 1, 1848, is stated to have been $1^{\circ} 34' \cdot 91$ West; and the mean annual increase of West Declination between 1845 and 1851, $1' \cdot 952$.

I have since received, through the kindness of Mr. Kingston, the present Director of the Toronto Observatory, a continuation of the series made at intervals in the years 1853 and 1854, with the same instrument in the same locality; and the commencement of a new series in 1855, with the Declinometer placed in a new building. The results are contained in the following table.

TABLE LXXX.

Dates.	Mean Observed Declination.	Mean Reading of the Observatory Declinometer.	Mean Monthly Reading of the Observatory Declinometer.	Differences, $\alpha - \beta$.		Observed Declination reduced to the Mean Monthly Reading of the Observatory Declinometer.
				Sec. Div.	Arc.	
1853:	$^{\circ}$ $'$ $''$	Sec. Div.	Sec. Div.		$'$	$^{\circ}$ $'$ $''$
July 28, 29, and 30	- 1 48'6	349'1	355'7	-6	-4'7	1 43'8 W.
August 24, 25, and 26	- 1 51'1	350'0	355'3	-5'3	-3'8	1 47'3
1854:						
January 24 to 27	- 1 52'0	350'4	351'0	-1'5	-1'1	1 50'9
February 23 to 28	- 1 46'6	348'9	351'1	-2'1	-1'5	1 45'0
March 24 to 30	- 1 51'7	345'9	350'2	-4'3	-3'1	1 48'6
April 25 to 27	- 1 52'4	342'8	350'1	-7'2	-5'2	1 47'3
June 22 to 24	- 1 51'5	344'6	350'2	-5'6	-4'0	1 47'3
New Series commenced after rebuilding the Observatory.						
1855:						
August 24	- 1 56'7	369'2	376'7	-7'6	-5'4	1 51'3
September 20	- 1 54'2	373'5	377'5	-4'0	-2'9	1 51'3
October 16 and 17	- 1 55'5	372'8	375'8	-3'0	-2'1	1 53'4
November 16	- 1 58'8	370'6	375'6	-5'0	-3'6	1 55'2
December 17 and 18	- 1 56'6	373'6	375'4	-1'8	-1'3	1 55'3

The annual secular change from 1845 to 1851 inclusive is an increase of 1'95 West Declination; from July 1851 to April 1854 (two years and nine months), an increase of 2'54; and, assuming the circumstances of the new series to be strictly comparable with those of the old series, the increase from April 1854 to October 1855 is at the mean annual rate of 3'4. It seems probable, therefore, that the rate of the secular increase of West Declination at Toronto is augmenting.

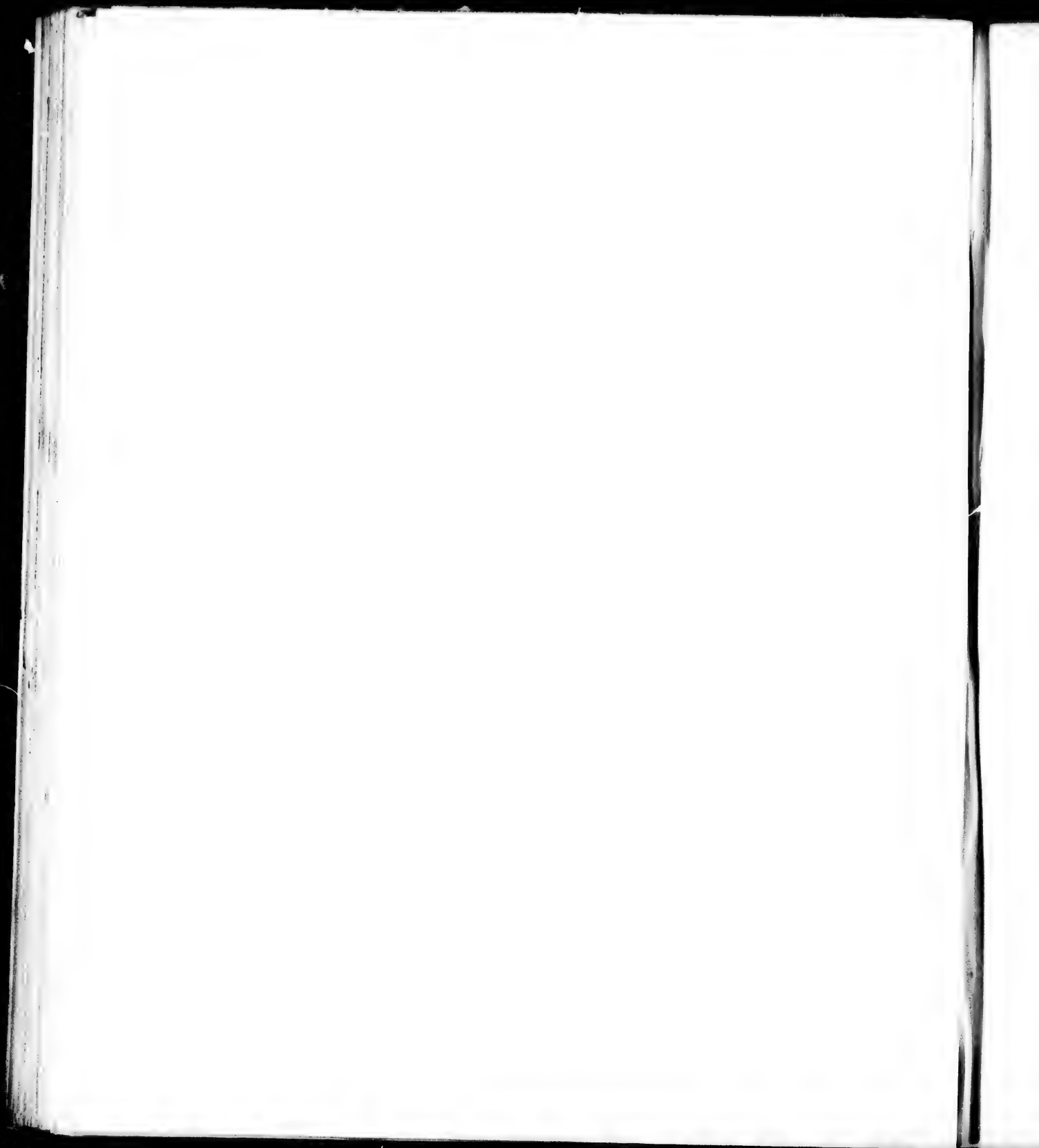
Captain Younghusband, R.A., who had been Director of the Toronto Observatory from 1841 to 1844 inclusive, and who had subsequently held the appointment of my Assistant at Woolwich, was recalled in January 1854 to regimental duty, from which he had been detached for more than twelve years. Since that date I have had no other assistance than that which I have received from Mr. Magrath, Principal Clerk, and

four non-commissioned officers of the Royal Artillery, acting as Assistant Clerks, who are changed occasionally as military convenience requires.

The long experience which Mr. Magrath has had in the office in which he has served since its commencement in 1840, and his unwearied assiduity and devotion, together with the uniform good conduct of the non-commissioned officers, have enabled me to carry on the duties since December 1853 without requiring the assistance of an officer.

EDWARD SABINE,
Major-General.

Woolwich, March 1857.



TORONTO, 1846 to 1848.

MAGNETICAL OBSERVATIONS.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JANUARY.	1	115° 7'	114° 6'	113° 8'	113° 0'	112° 2'	111° 4'	109° 0'	109° 4'	111° 0'	112° 7'	113° 4'
	2	114° 5'	114° 8'	114° 8'	118° 0'	116° 1'	113° 2'	111° 0'	110° 8'	112° 0'	112° 4'	112° 6'
	3	114° 8'	114° 0'	115° 8'	116° 0'	116° 6'	114° 9'	113° 6'	111° 0'	110° 8'	108° 5'	112° 5'
	4	—	—	—	—	—	—	—	—	—	—	—
	5	114° 0'	114° 1'	117° 8'	118° 7'	117° 0'	114° 8'	111° 6'	110° 0'	111° 1'	111° 0'	111° 4'
	6	115° 6'	115° 8'	117° 0'	119° 2'	117° 7'	110° 3'	111° 0'	109° 0'	110° 0'	111° 2'	112° 4'
	7	111° 8'	116° 7'	117° 0'	117° 3'	113° 2'	113° 8'	104° 8'	105° 2'	111° 2'	109° 7'	114° 0'
	8	117° 8'	114° 0'	114° 8'	117° 0'	116° 2'	115° 0'	111° 4'	109° 8'	111° 4'	112° 2'	113° 5'
	9	115° 7'	116° 2'	118° 0'	117° 4'	116° 5'	113° 9'	111° 4'	109° 4'	111° 6'	112° 2'	113° 2'
	10	116° 0'	116° 1'	117° 3'	118° 4'	115° 6'	113° 0'	111° 8'	112° 0'	112° 1'	113° 0'	112° 9'
	11	—	—	—	—	—	—	—	—	—	—	—
	12	112° 2'	114° 1'	110° 0'	109° 4'	116° 0'	115° 0'	113° 0'	111° 2'	109° 7'	110° 0'	111° 9'
	13	114° 3'	116° 3'	118° 0'	117° 4'	116° 6'	114° 9'	114° 4'	113° 5'	113° 6'	110° 4'	111° 8'
	14	110° 4'	102° 9'	115° 1'	119° 1'	118° 0'	115° 0'	114° 2'	114° 0'	111° 3'	111° 2'	118° 3'
	15	113° 8'	114° 5'	114° 4'	118° 8'	115° 9'	113° 2'	112° 1'	113° 2'	113° 0'	112° 1'	112° 4'
	16	111° 0'	115° 4'	120° 8'	120° 7'	116° 9'	115° 8'	114° 0'	112° 2'	110° 0'	109° 0'	112° 0'
	17	119° 0'	117° 7'	120° 4'	119° 4'	115° 4'	115° 2'	110° 4'	108° 4'	107° 5'	107° 6'	112° 7'
	18	—	—	—	—	—	—	—	—	—	—	—
	19	115° 7'	116° 2'	118° 0'	119° 0'	118° 8'	115° 1'	112° 0'	109° 2'	112° 0'	112° 2'	113° 0'
	20	116° 8'	117° 8'	118° 2'	119° 0'	116° 4'	113° 2'	110° 2'	107° 5'	111° 4'	114° 7'	114° 1'
	21	116° 0'	116° 4'	119° 2'	119° 8'	118° 8'	116° 2'	110° 1'	107° 0'	105° 9'	109° 5'	113° 0'
	22	118° 3'	119° 6'	120° 2'	120° 8'	119° 1'	116° 2'	112° 7'	108° 8'	108° 0'	110° 4'	113° 2'
	23	116° 2'	117° 2'	119° 8'	120° 0'	118° 7'	116° 0'	111° 7'	107° 9'	109° 4'	112° 1'	112° 3'
	24	116° 8'	121° 7'	121° 2'	119° 0'	118° 4'	114° 1'	110° 0'	104° 5'	109° 5'	112° 0'	111° 2'
	25	—	—	—	—	—	—	—	—	—	—	—
	26	117° 0'	116° 8'	119° 0'	120° 0'	117° 2'	113° 4'	111° 0'	108° 3'	109° 4'	111° 0'	112° 3'
	27	115° 2'	115° 4'	119° 0'	116° 8'	112° 9'	108° 8'	108° 9'	107° 2'	109° 0'	112° 4'	114° 2'
	28	119° 8'	117° 0'	120° 4'	113° 8'	110° 6'	106° 2'	109° 0'	109° 4'	110° 2'	111° 6'	114° 0'
	29	117° 0'	117° 3'	119° 5'	119° 0'	117° 6'	113° 8'	111° 8'	110° 2'	111° 1'	111° 8'	112° 8'
	30	116° 3'	117° 7'	120° 0'	118° 7'	117° 0'	113° 0'	108° 7'	107° 2'	107° 2'	109° 0'	110° 7'
	31	116° 0'	118° 8'	120° 8'	120° 2'	116° 8'	114° 1'	110° 0'	108° 0'	109° 2'	110° 8'	113° 2'
February 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	115° 46'	115° 89'	117° 97'	118° 22'	116° 63'	113° 86'	111° 23'	109° 55'	110° 26'	111° 07'	112° 85'	114° 13'
FEBRUARY.	2	117° 2'	111° 2'	117° 0'	115° 4'	117° 0'	115° 1'	112° 2'	109° 9'	109° 4'	109° 0'	111° 0'
	3	113° 2'	117° 4'	120° 4'	120° 8'	117° 3'	117° 6'	113° 8'	109° 2'	109° 6'	110° 0'	111° 7'
	4	115° 2'	117° 8'	117° 8'	118° 2'	113° 9'	113° 5'	112° 0'	109° 8'	107° 8'	108° 0'	110° 3'
	5	114° 9'	114° 4'	116° 8'	115° 8'	116° 2'	113° 0'	111° 8'	110° 2'	110° 0'	111° 4'	112° 0'
	6	115° 0'	115° 6'	117° 0'	117° 0'	117° 0'	115° 0'	113° 0'	111° 8'	111° 2'	112° 0'	112° 2'
	7	116° 4'	115° 0'	116° 0'	117° 2'	114° 8'	110° 0'	108° 0'	108° 2'	109° 5'	110° 4'	112° 7'
	8	—	—	—	—	—	—	—	—	—	—	—
	9	118° 4'	116° 4'	115° 8'	120° 4'	107° 0'	111° 0'	110° 0'	110° 0'	110° 7'	112° 2'	113° 1'
	10	114° 2'	114° 2'	118° 3'	117° 4'	113° 9'	111° 7'	108° 0'	107° 8'	109° 7'	112° 6'	113° 6'
	11	114° 0'	114° 3'	116° 0'	116° 5'	113° 4'	111° 7'	110° 8'	110° 2'	110° 4'	112° 0'	114° 0'
	12	114° 1'	116° 0'	120° 0'	117° 0'	113° 3'	111° 2'	109° 2'	108° 8'	110° 0'	110° 2'	111° 1'
	13	116° 0'	116° 5'	118° 0'	116° 8'	113° 8'	111° 3'	109° 2'	108° 5'	109° 0'	109° 8'	111° 8'
	14	120° 3'	120° 8'	122° 1'	118° 9'	116° 2'	112° 5'	109° 0'	107° 0'	108° 0'	108° 2'	110° 0'
	15	—	—	—	—	—	—	—	—	—	—	—
	16	109° 8'	115° 0'	113° 2'	114° 8'	113° 8'	112° 6'	111° 4'	108° 6'	110° 8'	114° 2'	110° 0'
	17	115° 0'	116° 0'	116° 0'	115° 7'	116° 1'	114° 0'	109° 0'	109° 2'	108° 0'	111° 0'	112° 4'
	18	114° 3'	116° 2'	118° 0'	114° 7'	117° 2'	116° 2'	114° 4'	111° 4'	108° 8'	109° 0'	113° 8'
	19	115° 0'	115° 8'	117° 0'	117° 0'	115° 6'	114° 9'	114° 2'	112° 4'	112° 0'	113° 0'	113° 2'
	20	115° 3'	116° 2'	117° 0'	117° 0'	115° 1'	112° 2'	110° 0'	110° 0'	110° 2'	112° 0'	112° 0'
	21	115° 2'	116° 2'	117° 0'	116° 0'	114° 1'	110° 3'	110° 0'	111° 0'	111° 0'	110° 0'	109° 6'
	22	—	—	—	—	—	—	—	—	—	—	—
	23	116° 0'	116° 0'	115° 8'	115° 0'	114° 0'	112° 9'	111° 8'	111° 2'	111° 2'	111° 0'	110° 8'
	24	116° 7'	117° 0'	118° 7'	118° 0'	114° 8'	111° 0'	110° 2'	109° 8'	110° 8'	112° 0'	111° 5'
	25	116° 2'	116° 8'	118° 2'	117° 1'	116° 2'	113° 4'	107° 0'	103° 7'	104° 8'	103° 8'	104° 0'
	26	117° 8'	119° 8'	120° 0'	117° 2'	110° 3'	111° 2'	108° 8'	107° 2'	106° 0'	109° 2'	112° 4'
	27	117° 5'	118° 8'	119° 4'	118° 8'	118° 1'	115° 0'	111° 4'	110° 0'	108° 1'	110° 0'	110° 8'
	28	116° 6'	119° 0'	121° 0'	120° 6'	117° 2'	111° 2'	108° 0'	107° 0'	107° 5'	109° 3'	112° 0'
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	115° 60'	116° 35'	117° 77'	115° 55'	114° 85'	112° 85'	110° 55'	109° 30'	109° 31'	110° 38'	111° 54'	111° 70'

DECLINATION.

Angular Value of one Scale Division of the Declinometer = $0^{\circ}721$. Increasing Numbers denote decreasing Westerly Declination.

	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.
11 ^h .	113 ^h 4	115 ^h 1	115 ^h 4	117 ^h 2	116 ^h 2	118 ^h 8	114 ^h 3	114 ^h 4	114 ^h 0	113 ^h 2	112 ^h 8	114 ^h 4	114 ^h 8	114 ^h 66
12 ^h .	114 ^h 1	115 ^h 0	115 ^h 0	116 ^h 0	115 ^h 7	117 ^h 0	116 ^h 3	114 ^h 2	113 ^h 4	114 ^h 2	114 ^h 2	114 ^h 0	110 ^h 0	114 ^h 14
13 ^h .	114 ^h 2	113 ^h 2	116 ^h 1	117 ^h 0	116 ^h 2	116 ^h 2	116 ^h 8	113 ^h 0	114 ^h 2	117 ^h 0	114 ^h 2	114 ^h 7	114 ^h 4	114 ^h 49
14 ^h .	110 ^h 2	113 ^h 2	111 ^h 9	116 ^h 3	115 ^h 2	117 ^h 2	117 ^h 0	115 ^h 0	115 ^h 0	114 ^h 4	113 ^h 9	113 ^h 0	114 ^h 8	114 ^h 19
15 ^h .	114 ^h 0	115 ^h 2	112 ^h 7	115 ^h 0	116 ^h 8	116 ^h 2	115 ^h 3	117 ^h 0	104 ^h 2	115 ^h 5	114 ^h 6	121 ^h 0	115 ^h 8	114 ^h 27
16 ^h .	113 ^h 9	113 ^h 6	116 ^h 2	116 ^h 0	114 ^h 0	115 ^h 0	117 ^h 0	116 ^h 5	109 ^h 2	108 ^h 3	109 ^h 0	118 ^h 6	111 ^h 0	113 ^h 08
17 ^h .	115 ^h 0	115 ^h 0	114 ^h 8	115 ^h 0	115 ^h 4	115 ^h 2	115 ^h 2	115 ^h 1	115 ^h 5	115 ^h 2	115 ^h 6	115 ^h 8	115 ^h 4	114 ^h 68
18 ^h .	114 ^h 0	115 ^h 9	115 ^h 2	115 ^h 3	115 ^h 3	115 ^h 3	115 ^h 3	115 ^h 0	115 ^h 4	116 ^h 0	113 ^h 8	115 ^h 4	114 ^h 73	114 ^h 73
19 ^h .	118 ^h 2	114 ^h 2	115 ^h 2	116 ^h 0	115 ^h 8	115 ^h 4	115 ^h 0	116 ^h 2	130 ^h 2	116 ^h 5	121 ^h 1	117 ^h 0	120 ^h 0	116 ^h 21
20 ^h .	117 ^h 8	114 ^h 2	115 ^h 0	115 ^h 8	116 ^h 2	115 ^h 8	115 ^h 0	114 ^h 1	114 ^h 2	114 ^h 0	114 ^h 0	114 ^h 2	113 ^h 5	113 ^h 60
21 ^h .	111 ^h 8	114 ^h 1	115 ^h 4	140 ^h 4	114 ^h 5	119 ^h 0	122 ^h 9	119 ^h 0	114 ^h 3	113 ^h 0	113 ^h 0	113 ^h 4	118 ^h 8	116 ^h 23
22 ^h .	114 ^h 0	113 ^h 4	124 ^h 4	118 ^h 1	116 ^h 0	116 ^h 1	111 ^h 0	114 ^h 5	113 ^h 8	111 ^h 6	120 ^h 2	116 ^h 4	114 ^h 0	114 ^h 70
23 ^h .	112 ^h 8	114 ^h 1	115 ^h 2	116 ^h 0	117 ^h 4	116 ^h 1	115 ^h 0	115 ^h 8	117 ^h 0	118 ^h 9	114 ^h 7	116 ^h 4	115 ^h 5	114 ^h 94
24 ^h .	111 ^h 3	113 ^h 0	114 ^h 2	117 ^h 0	115 ^h 9	117 ^h 5	118 ^h 2	121 ^h 6	119 ^h 0	116 ^h 2	123 ^h 5	113 ^h 5	113 ^h 5	115 ^h 51
25 ^h .	117 ^h 1	115 ^h 6	115 ^h 3	115 ^h 8	121 ^h 0	113 ^h 0	118 ^h 0	115 ^h 2	115 ^h 9	117 ^h 7	116 ^h 5	118 ^h 2	117 ^h 3	115 ^h 43
26 ^h .	114 ^h 4	114 ^h 6	116 ^h 0	115 ^h 1	117 ^h 8	120 ^h 8	115 ^h 1	115 ^h 2	115 ^h 0	115 ^h 2	116 ^h 8	115 ^h 9	116 ^h 3	115 ^h 39
27 ^h .	114 ^h 1	114 ^h 0	115 ^h 1	116 ^h 0	115 ^h 4	117 ^h 0	115 ^h 7	115 ^h 1	115 ^h 0	120 ^h 0	116 ^h 0	116 ^h 0	116 ^h 2	115 ^h 33
28 ^h .	114 ^h 0	114 ^h 2	115 ^h 8	116 ^h 2	115 ^h 8	117 ^h 8	113 ^h 8	115 ^h 0	115 ^h 7	116 ^h 2	116 ^h 0	116 ^h 6	117 ^h 0	114 ^h 85
29 ^h .	118 ^h 5	114 ^h 5	115 ^h 7	115 ^h 4	115 ^h 0	115 ^h 2	115 ^h 3	115 ^h 0	115 ^h 4	115 ^h 0	115 ^h 0	114 ^h 6	115 ^h 8	115 ^h 32
30 ^h .	112 ^h 4	117 ^h 2	118 ^h 4	120 ^h 0	115 ^h 4	113 ^h 9	114 ^h 0	114 ^h 4	120 ^h 0	149 ^h 4	129 ^h 5	134 ^h 6	125 ^h 8	118 ^h 60
31 ^h .	115 ^h 5	114 ^h 8	117 ^h 7	115 ^h 8	115 ^h 7	111 ^h 2	114 ^h 0	113 ^h 2	113 ^h 8	114 ^h 0	114 ^h 0	114 ^h 8	116 ^h 0	114 ^h 66
32 ^h .	112 ^h 2	112 ^h 0	112 ^h 8	112 ^h 9	113 ^h 0	113 ^h 0	112 ^h 4	112 ^h 0	112 ^h 0	112 ^h 8	112 ^h 4	114 ^h 0	115 ^h 2	113 ^h 42
33 ^h .	114 ^h 3	114 ^h 4	114 ^h 7	114 ^h 2	114 ^h 0	120 ^h 2	113 ^h 8	112 ^h 8	113 ^h 0	113 ^h 2	115 ^h 2	118 ^h 0	114 ^h 2	113 ^h 82
34 ^h .	114 ^h 2	114 ^h 8	111 ^h 4	124 ^h 2	122 ^h 2	123 ^h 0	123 ^h 8	116 ^h 0	116 ^h 0	111 ^h 1	117 ^h 0	118 ^h 0	114 ^h 95	114 ^h 95
35 ^h .	113 ^h 0	113 ^h 3	113 ^h 6	115 ^h 0	114 ^h 4	114 ^h 8	120 ^h 5	112 ^h 0	109 ^h 8	111 ^h 7	113 ^h 1	110 ^h 2	115 ^h 4	114 ^h 11
36 ^h .	112 ^h 8	113 ^h 8	114 ^h 6	116 ^h 4	114 ^h 8	114 ^h 8	117 ^h 6	112 ^h 0	110 ^h 0	114 ^h 8	109 ^h 2	117 ^h 2	115 ^h 0	113 ^h 69
37 ^h .	114 ^h 0	114 ^h 0	115 ^h 0	115 ^h 0	121 ^h 0	114 ^h 0	113 ^h 5	117 ^h 2	114 ^h 0	115 ^h 0	111 ^h 4	114 ^h 7	115 ^h 0	114 ^h 49
38 ^h .	114 ^h 13	114 ^h 31	115 ^h 29	117 ^h 15	116 ^h 15	116 ^h 39	115 ^h 99	115 ^h 18	114 ^h 45	115 ^h 74	115 ^h 30	116 ^h 30	115 ^h 71	114 ^h 80
39 ^h .	116 ^h 2	113 ^h 9	115 ^h 7	117 ^h 0	116 ^h 9	116 ^h 9	116 ^h 0	115 ^h 3	113 ^h 0	116 ^h 0	110 ^h 4	109 ^h 2	116 ^h 2	114 ^h 05
40 ^h .	112 ^h 2	113 ^h 2	113 ^h 9	114 ^h 1	115 ^h 8	115 ^h 2	115 ^h 0	113 ^h 2	113 ^h 4	113 ^h 2	106 ^h 4	114 ^h 4	113 ^h 0	113 ^h 92
41 ^h .	112 ^h 2	113 ^h 0	114 ^h 0	114 ^h 2	118 ^h 4	115 ^h 0	114 ^h 2	113 ^h 8	113 ^h 6	113 ^h 2	113 ^h 4	113 ^h 7	114 ^h 0	113 ^h 62
42 ^h .	112 ^h 2	113 ^h 2	113 ^h 8	114 ^h 0	114 ^h 2	114 ^h 0	114 ^h 0	113 ^h 8	113 ^h 7	113 ^h 6	113 ^h 0	113 ^h 8	113 ^h 6	113 ^h 48
43 ^h .	112 ^h 1	111 ^h 6	112 ^h 0	115 ^h 2	115 ^h 6	116 ^h 3	116 ^h 1	115 ^h 4	116 ^h 2	115 ^h 8	113 ^h 0	113 ^h 1	119 ^h 0	114 ^h 56
44 ^h .	113 ^h 0	113 ^h 3	114 ^h 0	115 ^h 0	115 ^h 0	113 ^h 8	113 ^h 3	122 ^h 7	123 ^h 0	123 ^h 6	123 ^h 0	123 ^h 2	121 ^h 0	115 ^h 47
45 ^h .	114 ^h 0	114 ^h 2	114 ^h 2	114 ^h 0	114 ^h 0	114 ^h 2	112 ^h 8	112 ^h 8	113 ^h 4	113 ^h 0	114 ^h 8	115 ^h 0	114 ^h 2	112 ^h 17
46 ^h .	114 ^h 0	113 ^h 8	114 ^h 2	115 ^h 4	114 ^h 0	113 ^h 5	113 ^h 2	113 ^h 6	113 ^h 6	113 ^h 8	115 ^h 0	115 ^h 0	115 ^h 8	113 ^h 68
47 ^h .	113 ^h 0	112 ^h 0	113 ^h 0	115 ^h 0	114 ^h 3	114 ^h 2	114 ^h 4	114 ^h 0	113 ^h 8	114 ^h 0	114 ^h 8	115 ^h 2	115 ^h 8	113 ^h 52
48 ^h .	111 ^h 2	111 ^h 0	110 ^h 3	113 ^h 4	118 ^h 5	113 ^h 9	115 ^h 8	111 ^h 8	113 ^h 2	114 ^h 2	114 ^h 0	111 ^h 2	121 ^h 0	113 ^h 34
49 ^h .	109 ^h 2	107 ^h 0	108 ^h 0	115 ^h 0	113 ^h 8	115 ^h 0	116 ^h 2	117 ^h 0	97 ^h 2	128 ^h 0	117 ^h 6	118 ^h 2	116 ^h 0	113 ^h 80
50 ^h .	115 ^h 0	113 ^h 4	113 ^h 8	120 ^h 0	116 ^h 2	113 ^h 8	115 ^h 0	111 ^h 8	111 ^h 0	113 ^h 8	116 ^h 0	117 ^h 5	116 ^h 0	113 ^h 65
51 ^h .	110 ^h 0	111 ^h 8	116 ^h 4	113 ^h 6	114 ^h 6	114 ^h 8	115 ^h 0	112 ^h 1	112 ^h 7	112 ^h 5	115 ^h 0	114 ^h 0	114 ^h 0	113 ^h 29
52 ^h .	109 ^h 3	109 ^h 7	111 ^h 8	113 ^h 0	114 ^h 8	113 ^h 0	113 ^h 7	114 ^h 5	114 ^h 8	111 ^h 0	115 ^h 0	115 ^h 0	115 ^h 2	113 ^h 53
53 ^h .	111 ^h 9	112 ^h 2	112 ^h 4	114 ^h 0	114 ^h 0	114 ^h 0	114 ^h 0	113 ^h 3	114 ^h 7	113 ^h 8	114 ^h 2	114 ^h 8	114 ^h 6	114 ^h 08
54 ^h .	110 ^h 6	111 ^h 1	110 ^h 6	113 ^h 2	114 ^h 8	114 ^h 5	114 ^h 0	113 ^h 6	116 ^h 2	118 ^h 2	115 ^h 4	115 ^h 8	113 ^h 8	113 ^h 70
55 ^h .	109 ^h 6	110 ^h 4	112 ^h 0	112 ^h 4	113 ^h 2	114 ^h 0	113 ^h 8	114 ^h 0	114 ^h 4	116 ^h 0	115 ^h 0	115 ^h 6	115 ^h 6	113 ^h 20
56 ^h .	111 ^h 0	111 ^h 2	112 ^h 8	113 ^h 2	113 ^h 4	114 ^h 0	115 ^h 2	115 ^h 0	114 ^h 0	114 ^h 2	115 ^h 5	115 ^h 0	116 ^h 1	113 ^h 51
57 ^h .	111 ^h 5	111 ^h 3	112 ^h 4	113 ^h 0	118 ^h 7	114 ^h 0	114 ^h 0	114 ^h 1	114 ^h 8	115 ^h 0	115 ^h 4	115 ^h 6	117 ^h 0	114 ^h 00
58 ^h .	102 ^h 2	103 ^h 7	104 ^h 0	114 ^h 3	112 ^h 8	112 ^h 6	112 ^h 0	112 ^h 0	112 ^h 7	113 ^h 0	114 ^h 2	118 ^h 2	118 ^h 6	111 ^h 31
59 ^h .	113 ^h 0	114 ^h 2	116 ^h 0	121 ^h 2	122 ^h 0	119 ^h 0	117 ^h 0	112 ^h 8	113 ^h 2	116 ^h 4	122 ^h 4	117 ^h 0	115 ^h 0	115 ^h 09
60 ^h .	112<													

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	2	115°0	117°6	121°0	118°0	114°0	112°6	110°2	107°8	107°8	108°4	109°2
	3	116°0	118°2	120°0	117°8	116°2	109°4	108°5	109°6	109°0	108°8	111°0
	4	115°4	116°2	118°4	117°5	116°4	109°5	108°6	107°2	107°1	108°2	110°1
	5	116°2	116°0	118°8	113°9	116°4	116°3	114°0	112°0	111°6	111°2	111°5
	6	116°1	118°7	119°0	119°0	118°0	114°8	111°8	110°0	109°4	110°8	112°2
	7	116°0	119°2	121°2	121°4	119°0	115°8	111°8	109°2	107°8	108°0	108°8
	8	—	—	—	—	—	—	—	—	—	—	—
	9	115°0	118°2	118°6	120°0	118°1	114°4	109°8	108°8	108°6	109°0	110°9
	10	116°0	117°2	119°7	119°7	117°4	111°3	106°4	104°0	105°1	106°8	109°0
	11	116°2	118°8	118°7	119°7	115°6	111°9	109°1	108°3	106°3	101°9	107°8
	12	118°2	121°4	122°4	118°4	116°1	110°2	107°0	106°0	105°8	108°4	111°6
	13	118°0	112°2	101°2	106°2	99°0	97°4	101°2	104°4	105°4	105°0	105°1
	14	124°2	120°8	111°0	111°4	112°9	105°5	103°9	100°6	106°8	106°0	113°2
	15	—	—	—	—	—	—	—	—	—	—	—
	16	116°8	118°2	119°2	120°2	116°8	110°8	105°2	103°8	103°0	100°0	112°4
	17	116°2	100°4	105°2	115°6	119°4	112°3	106°9	105°0	105°0	106°2	120°0
	18	102°2	114°0	118°8	121°3	117°0	113°5	110°9	107°4	107°4	108°2	108°9
	19	115°0	117°6	120°2	118°2	118°1	114°0	110°4	108°2	107°0	107°3	109°6
	20	116°0	117°0	121°2	123°8	120°9	115°1	110°7	106°0	104°7	104°3	105°8
	21	116°4	118°8	118°8	120°2	114°2	110°7	107°7	105°0	103°0	102°2	105°2
	22	—	—	—	—	—	—	—	—	—	—	—
	23	116°5	119°0	120°2	119°8	115°5	110°8	108°0	104°0	106°0	107°2	109°8
	24	118°5	119°2	120°8	122°6	116°9	108°4	103°2	101°0	102°2	104°4	108°8
	25	115°2	116°8	119°1	118°8	119°0	114°0	108°8	106°2	104°4	106°2	109°6
	26	97°4	116°2	123°4	116°4	116°3	110°4	108°2	104°9	105°1	105°9	110°0
	27	119°2	119°2	120°6	121°0	113°6	111°2	109°8	106°0	106°2	107°5	108°9
	28	116°3	115°2	120°6	122°3	116°2	114°4	110°2	107°6	105°3	105°7	107°3
	29	—	—	—	—	—	—	—	—	—	—	—
	30	114°8	115°2	122°4	124°1	118°4	113°6	109°6	105°2	103°8	104°4	107°0
	31	117°4	119°4	119°6	119°0	116°8	110°4	107°4	105°0	105°2	105°4	106°8
Hourly Means		115°39	116°95	118°47	118°70	116°08	111°49	108°43	106°35	106°12	106°44	109°63
APRIL.	1	112°6	115°8	119°4	120°4	117°6	111°8	107°2	105°6	106°6	106°1	106°6
	2	117°4	117°6	114°4	114°2	117°3	113°6	110°4	107°0	107°2	107°0	107°5
	3	118°7	121°2	122°8	122°0	117°2	112°8	108°0	105°0	102°8	105°7	107°3
	4	118°0	121°0	122°8	121°3	118°8	114°5	102°0	100°0	103°0	104°0	105°2
	5	—	—	—	—	—	—	—	—	—	—	—
	6	111°0	97°0	81°0	92°7	115°0	115°0	108°4	107°9	105°2	102°0	110°5
	7	119°0	117°4	117°2	119°2	113°0	108°8	107°2	105°0	106°9	105°2	106°2
	8	117°0	117°2	114°1	116°2	112°5	107°1	105°0	104°1	106°4	106°9	109°8
	9	117°0	119°0	119°8	117°8	113°7	107°8	104°5	102°5	103°0	105°3	107°2
	10 ^a	—	—	—	—	—	—	—	—	—	—	—
	11	119°8	118°0	117°2	118°8	114°1	108°0	110°6	105°4	105°6	106°8	109°9
	12	—	—	—	—	—	—	—	—	—	—	—
	13	108°2	118°6	115°0	109°0	112°0	110°4	104°7	100°0	102°4	102°0	107°0
	14	117°4	107°0	108°0	116°7	116°2	110°0	106°9	103°2	102°0	99°7	102°2
	15	122°2	123°2	124°7	121°8	113°1	110°3	108°0	106°8	103°0	105°4	102°2
	16	112°6	117°2	117°8	113°3	106°4	103°4	98°4	104°0	106°6	102°2	116°6
	17	118°0	120°2	121°0	111°0	114°3	113°0	108°6	105°1	106°8	105°7	108°6
	18	117°0	118°8	118°2	119°2	114°7	110°2	106°6	105°0	104°2	102°8	105°7
	19	—	—	—	—	—	—	—	—	—	—	—
	20	114°0	117°0	117°0	116°9	114°0	110°0	107°8	107°0	105°7	106°5	106°1
	21	119°0	121°0	122°2	120°0	116°0	109°2	106°9 ^b	103°2 ^c	103°7	105°0	107°7
	22	119°6	121°0	122°7	119°0	115°2	108°0	111°2	102°4	100°8	103°8	108°9
	23	118°8	119°4	120°8	116°8	111°7	105°8	102°3	101°2	103°2	104°9	106°8
	24	116°4	118°6	118°4	117°0	115°7	107°4	106°2	105°2	104°0	106°2	109°5
	25	118°2	123°0	122°2	118°3	113°2	109°0	107°0	103°0	104°0	102°0	108°0
	26	—	—	—	—	—	—	—	—	—	—	—
	27	117°8	119°0	118°2	117°2	106°7	107°0	105°2	106°4	106°2	108°0	109°8
	28	119°0	120°0	119°2	114°2	110°2	106°4	106°0	106°4	106°2	107°0	107°9
	29	118°7	121°6	120°8	121°4	115°6	111°4	106°0	106°0	106°2	106°4	107°2
	30	121°4	120°8	119°7	114°4	110°9	107°4	103°0	102°8	105°0	108°0	109°7
Hourly Means		117°15	118°02	117°38	116°35	113°80	109°53	106°32	104°41	104°67	104°98	107°76

^a Good Friday.^b Two minutes late.^c Three minutes late.

DECLINATION.

Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.

	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.
Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	111°7'	111°4'	111°9'	113°1'	113°1'	113°8'	113°7'	114°2'	113°8'	113°8'	114°0'	114°8'	114°2'	113°13'
0	112°5'	112°2'	112°8'	113°0'	113°0'	113°9'	114°0'	118°2'	114°2'	112°6'	116°2'	116°4'	116°8'	113°76'
1	110°5'	112°1'	112°2'	112°9'	113°3'	114°0'	119°8'	116°0'	115°2'	113°2'	112°8'	112°0'	116°4'	113°12'
5	112°0'	112°0'	112°2'	113°0'	113°4'	113°0'	115°2'	114°8'	115°2'	115°0'	110°0'	117°0'	116°0'	114°03'
2	113°0'	112°8'	112°8'	113°0'	113°3'	113°8'	114°0'	114°0'	113°9'	114°1'	114°1'	115°4'	116°0'	114°17'
8	110°8'	111°0'	114°5'	113°1'	113°7'	113°9'	114°0'	—	—	—	—	—	—	113°82'
9	112°0'	112°2'	113°1'	113°9'	113°9'	114°0'	114°4'	113°2'	113°3'	113°3'	114°1'	114°2'	114°4'	113°99'
0	112°0'	112°8'	113°0'	114°3'	113°2'	114°0'	112°7'	113°0'	114°0'	114°2'	114°6'	115°0'	115°8'	112°97'
8	110°6'	112°2'	113°8'	113°6'	115°0'	114°8'	116°8'	119°8'	117°2'	115°3'	115°8'	116°2'	116°8'	113°84'
6	112°6'	110°6'	111°4'	113°8'	115°0'	117°2'	115°0'	114°8'	114°9'	112°2'	118°2'	119°3'	113°98'	110°33'
1	98°8'	104°0'	111°1'	111°5'	117°1'	117°5'	116°2'	116°4'	124°7'	126°0'	118°1'	116°0'	115°5'	110°33'
2	119°0'	118°2'	113°9'	120°8'	139°0'	117°0'	115°8'	—	—	—	—	—	—	114°22'
4	102°1'	108°0'	123°7'	108°0'	112°8'	119°8'	125°8'	111°4'	113°7'	113°0'	113°2'	114°7'	115°4'	113°87'
0	111°2'	112°0'	120°2'	130°0'	126°8'	120°2'	118°8'	122°2'	113°2'	121°8'	115°2'	113°0'	116°8'	111°75'
9	111°2'	112°2'	126°6'	110°1'	112°8'	113°0'	113°2'	113°9'	114°0'	117°0'	118°0'	118°2'	109°5'	113°11'
6	113°0'	112°0'	113°0'	112°8'	114°9'	113°4'	114°0'	114°0'	114°0'	114°6'	114°3'	114°0'	115°6'	113°55'
8	108°0'	110°8'	111°8'	112°0'	113°0'	113°0'	113°9'	113°4'	115°2'	114°6'	118°2'	117°3'	116°0'	113°45'
2	108°9'	111°2'	111°5'	112°5'	112°4'	112°8'	113°0'	—	—	—	—	—	—	112°20'
8	111°0'	111°0'	111°7'	112°6'	112°6'	113°0'	113°0'	114°6'	114°1'	115°8'	113°8'	115°0'	115°0'	113°26'
6	110°4'	111°0'	112°1'	112°1'	112°0'	112°3'	112°8'	113°4'	115°7'	114°8'	115°3'	116°6'	118°7'	112°22'
8	110°7'	111°4'	110°6'	112°0'	111°9'	112°8'	113°0'	117°6'	108°3'	124°5'	119°4'	115°1'	114°4'	113°38'
0	110°4'	113°0'	113°6'	113°7'	114°4'	114°2'	123°3'	112°4'	112°2'	110°4'	115°2'	115°6'	116°2'	112°45'
9	111°4'	114°4'	112°8'	118°3'	116°0'	113°6'	112°6'	113°4'	114°2'	113°8'	115°4'	114°0'	108°2'	113°39'
3	109°2'	113°2'	116°8'	127°6'	112°0'	115°6'	110°6'	—	—	—	—	—	—	113°27'
0	110°4'	111°8'	112°6'	112°4'	113°2'	113°2'	114°6'	117°2'	112°4'	109°9'	112°5'	113°8'	106°6'	112°96'
8	110°2'	113°0'	112°5'	112°8'	116°8'	112°4'	113°1'	114°6'	113°9'	113°9'	114°0'	113°5'	114°4'	113°19'
63	110°52'	111°79'	113°93'	114°34'	115°18'	114°47'	115°0'	115°28'	114°88'	115°21'	114°75'	115°23'	114°86'	113°32'
6	107°6'	110°0'	111°6'	112°3'	114°1'	112°8'	121°6'	118°4'	118°4'	115°6'	115°8'	115°4'	117°2'	113°35'
5	109°0'	110°3'	111°3'	111°8'	112°2'	113°2'	113°4'	114°2'	114°6'	111°4'	120°8'	121°2'	112°0'	112°88'
3	110°4'	112°0'	112°2'	113°0'	112°2'	112°8'	113°4'	114°0'	114°6'	115°3'	116°0'	114°2'	115°0'	113°27'
2	109°2'	111°6'	113°2'	113°6'	112°1'	113°2'	116°8'	—	—	—	—	—	—	113°70'
5	95°0'	120°7'	111°7'	113°4'	114°0'	117°9'	117°4'	120°2'	119°8'	117°8'	116°3'	117°0'	117°3'	108°90'
2	108°0'	113°0'	116°6'	114°0'	113°2'	107°2'	113°3'	111°0'	116°9'	115°8'	106°0'	110°2'	117°8'	111°57'
8	111°9'	112°0'	112°3'	114°0'	123°5'	114°4'	114°0'	107°4'	115°4'	114°8'	114°6'	114°2'	114°0'	112°45'
2	111°0'	113°4'	113°0'	113°0'	114°2'	113°2'	113°2'	—	—	—	—	—	—	113°37'
9	114°9'	113°3'	112°2'	115°0'	114°0'	112°8'	113°9'	118°3'	116°3'	121°7'	119°4'	116°8'	119°7'	113°43'
0	105°2'	106°4'	108°0'	110°5'	129°5'	119°2'	114°8'	111°6'	115°0'	114°2'	117°0'	116°4'	118°4'	111°44'
2	103°0'	107°2'	110°8'	112°0'	112°6'	112°4'	114°5'	113°0'	116°2'	112°8'	116°4'	116°0'	117°2'	111°15'
2	103°0'	103°8'	113°0'	105°6'	112°7'	118°0'	114°0'	117°4'	119°8'	119°1'	118°7'	114°8'	115°9'	113°42'
6	108°0'	107°4'	116°8'	124°8'	119°4'	140°0'	120°5'	114°0'	100°2'	—	125°5'	120°0'	118°7'	114°51'
6	107°0'	109°8'	111°2'	111°6'	111°8'	112°2'	113°2'	114°2'	113°0'	113°2'	113°7'	112°6'	117°0'	112°20'
7	107°5'	110°0'	110°9'	110°0'	111°6'	113°2'	113°4'	—	—	—	—	—	—	112°11'
1	108°3'	108°0'	107°2'	110°0'	112°4'	112°6'	113°8'	119°8'	115°2'	116°4'	115°0'	112°2'	113°0'	111°78'
7	110°0'	113°2'	113°4'	112°8'	112°8'	114°4'	114°0'	114°7'	114°5'	115°2'	114°7'	115°0'	115°0'	111°78'
9	111°9'	111°9'	113°0'	110°7'	112°6'	112°8'	111°9'	113°0'	113°6'	114°0'	115°0'	115°2'	116°2'	112°68'
8	109°0'	110°0'	110°4'	112°9'	110°5'	113°0'	113°8'	113°0'	115°0'	114°4'	115°5'	115°4'	115°4'	111°67'
5	113°0'	113°9'	113°0'	112°5'	113°2'	129°0'	129°4'	120°0'	115°0'	110°2'	112°4'	126°4'	114°4'	114°46'
0	110°0'	115°4'	113°0'	118°0'	117°4'	111°6'	113°0'	—	—	—	—	—	—	113°17'
8	112°0'	113°6'	113°8'	113°0'	115°9'	115°0'	114°5'	110°2'	112°9'	118°6'	117°0'	116°2'	116°0'	112°68'
9	110°0'	111°9'	112°0'	114°8'	120°3'	116°0'	115°8'	114°2'	115°5'	110°5'	113°0'	116°0'	115°9'	112°80'
2	109°8'	113°2'	113°0'	111°0'	118°0'	118°0'	114°5'	111°8'	114°4'	115°1'	115°3'	116°2'	116°2'	113°83'
7	109°8'	110°6'	113°0'	111°9'	112°0'	113°6'	114°8'	114°0'	113°8'	109°2'	110°0'	115°2'	117°7'	112°03'
76	108°58'	111°30'	113°86'	112°89'	114°89'	115°54'	115°32'	114°89'	114°49'	114°80'	114°96'	115°58'	116°20'	112°65'

* Three minutes late.

* Seven minutes late.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0'' 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
MAY.	Sc. Div. 118° 4	Sc. Div. 120° 7	Sc. Div. 118° 2	Sc. Div. 116° 4	Sc. Div. 110° 9	Sc. Div. 107° 8	Sc. Div. 103° 1	Sc. Div. 103° 0	Sc. Div. 105° 2	Sc. Div. 108° 3	Sc. Div. 111° 0	Sc. Div. 113° 0
	1 117° 0	119° 4	118° 0	116° 0	112° 0	106° 2	102° 6	103° 0	103° 0	107° 2	109° 4	110° 0
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4 124° 0	126° 7	125° 1	123° 8	120° 0	98° 2	101° 2	102° 8	101° 2	102° 4	105° 7	101° 0
	5 118° 6	119° 0	117° 0	113° 8	111° 0	106° 4	101° 5	101° 4	102° 0	103° 2	103° 4	103° 9
	6 117° 4	122° 5	121° 2	118° 0	113° 9	108° 7	105° 4	104° 0	105° 0	110° 2	109° 7	111° 0
	7 119° 8	119° 4	119° 5	117° 4	114° 1	109° 0	102° 0	100° 0	100° 5	102° 4	104° 0	106° 0
	8 118° 0	120° 5	119° 0	116° 6	114° 1	110° 0	104° 0	102° 0	104° 2	102° 7	103° 2	107° 0
	9 118° 0	121° 8	121° 3	117° 0	109° 0	104° 2	101° 8	105° 0	105° 0	104° 2	102° 3	107° 0
	10	—	—	—	—	—	—	—	—	—	—	—
	11 116° 2	116° 0	116° 4	118° 5	114° 6	112° 2	108° 8	105° 0	104° 8	103° 6	103° 3	105° 8
	12 118° 2	120° 2	126° 4	121° 0	107° 0	107° 2	106° 1	109° 2	111° 1	105° 0	113° 2	107° 7
	13 114° 8	116° 4	116° 5	116° 2	118° 5	115° 5	111° 2	112° 0	106° 2	109° 0	108° 3	108° 0
	14 117° 0	116° 2	116° 4	115° 6	109° 5	111° 3	108° 0	104° 0	103° 2	107° 0	107° 0	109° 2
	15 119° 0	121° 0	118° 8	118° 2	118° 2	111° 2	107° 8	106° 8	105° 4	106° 4	108° 6	110° 2
	16 118° 6	119° 8	121° 0	119° 2	115° 0	110° 8	109° 8	106° 4	104° 8	106° 0	107° 4	107° 7
	17	—	—	—	—	—	—	—	—	—	—	—
	18 121° 4	120° 0	124° 2	120° 0	114° 3	107° 4	106° 0	99° 2	100° 0	101° 7	106° 1	108° 3
	19 120° 4	122° 8	113° 4	117° 1	112° 1	106° 2	106° 5	103° 0	100° 0	104° 0	108° 4	109° 5
	20 103° 0	121° 4	117° 8	107° 3	102° 2	98° 2	103° 2	104° 0	108° 8	107° 0	112° 8	116° 2
	21 113° 2	121° 2	120° 7	112° 8	106° 2	102° 2	100° 0	100° 0	104° 6	106° 0	110° 3	113° 8
	22 118° 0	117° 4	124° 0	116° 4	111° 5	108° 2	100° 0	98° 5	103° 0	107° 5	111° 6	113° 9
	23 124° 6	127° 2	126° 8	115° 0	116° 2	103° 2	103° 2	101° 0	102° 0	104° 7	109° 2	112° 8
	24	—	—	—	—	—	—	—	—	—	—	—
	25 108° 8	109° 6	113° 4	107° 0	109° 5	108° 0	105° 0	104° 2	103° 8	104° 8	106° 8	107° 2
	26 115° 0	118° 8	120° 0	120° 0	114° 2	107° 8	104° 4	104° 4	104° 6	105° 0	109° 8	110° 4
	27 115° 0	116° 0	117° 0	114° 2	111° 2	104° 8	102° 0	100° 0	101° 8	104° 8	106° 5	111° 0
	28 120° 0	120° 0	122° 2	121° 2	115° 0	109° 6	104° 2	102° 6	103° 0	105° 2	108° 0	112° 0
	29 119° 2	121° 8	121° 4	121° 0	115° 3	109° 0	102° 0	100° 3	104° 0	104° 8	106° 8	109° 2
	30 125° 0	130° 0	126° 0	120° 2	117° 0	109° 2	106° 2	97° 6	100° 6	104° 2	105° 8	115° 4
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	117° 72	120° 22	120° 07	116° 92	112° 79	107° 40	104° 46	103° 05	103° 76	105° 28	107° 68	109° 51
JUNE.	1 120° 0	115° 5	113° 9	115° 8	112° 3	114° 0	106° 2	107° 4	108° 0	106° 2	107° 8	109° 2
	2 125° 8	127° 7	126° 2	118° 4	114° 2	112° 0	109° 6	100° 0	103° 8	105° 0	105° 9	108° 0
	3 120° 1	122° 2	121° 0	120° 2	119° 3	112° 8	113° 8	110° 0	111° 4	108° 7	108° 1	115° 1
	4 118° 2	120° 4	117° 8	115° 8	111° 2	106° 6	101° 0	100° 0	107° 0	108° 0	108° 8	111° 0
	5 117° 0	118° 4	121° 5	121° 2	119° 9	114° 3	111° 0	105° 3	105° 0	104° 0	107° 0	113° 2
	6 119° 0	120° 0	119° 2	115° 0	113° 2	109° 7	106° 7	103° 0	102° 2	100° 0	106° 2	108° 4
	7	—	—	—	—	—	—	—	—	—	—	—
	8 120° 0	121° 4	121° 0	120° 2	117° 0	112° 0	110° 2	105° 6	103° 0	102° 8	103° 2	106° 8
	9 124° 6	125° 0	126° 0	118° 2	115° 0	109° 2	107° 0	102° 3	102° 5	101° 8	105° 6	107° 0
	10 120° 0	122° 6	123° 0	125° 4	124° 6	116° 2	111° 8	110° 0	106° 6	105° 0	105° 0	109° 0
	11 120° 2	122° 4	123° 0	121° 8	117° 3	112° 3	108° 8	105° 0	101° 8	100° 9	101° 7	105° 6
	12 117° 8	118° 2	118° 0	120° 0	117° 8	111° 5	113° 0	107° 8	106° 0	105° 8	106° 4	108° 8
	13 131° 6	131° 8	118° 0	119° 0	116° 2	109° 6	106° 0	105° 6	103° 2	104° 6	105° 7	110° 1
	14	—	—	—	—	—	—	—	—	—	—	—
	15 118° 0	113° 7	117° 2	118° 6	117° 0	114° 8	115° 6	101° 3	100° 0	106° 0	103° 5	109° 7
	16 115° 2	109° 4	122° 6	118° 2	121° 0	109° 2	107° 0	109° 2	105° 0	110° 0	110° 9	111° 0
	17 119° 8	124° 2	123° 7	123° 0	116° 8	111° 3	106° 3	104° 8	107° 8	108° 0	112° 0	113° 7
	18 115° 8	120° 0	121° 3	116° 8	111° 8	111° 0	106° 6	105° 0	104° 2	110° 8	110° 4	112° 0
	19 117° 8	118° 2	120° 0	114° 0	109° 6	107° 3	107° 7	103° 8	103° 8	106° 2	108° 5	110° 2
	20 119° 0	120° 2	119° 2	119° 8	113° 8	109° 8	107° 0	107° 0	105° 6	107° 0	108° 4	111° 0
	21	—	—	—	—	—	—	—	—	—	—	—
	22 129° 6	128° 4	126° 2	121° 8	114° 3	108° 8	105° 6	105° 1	102° 3	105° 1	107° 2	110° 0
	23 119° 2	120° 4	119° 2	117° 0	115° 2	108° 8	108° 0	102° 8	105° 2	109° 2	106° 3	111° 0
	24 117° 0	122° 3	114° 8	113° 0	111° 3	109° 3	106° 3	105° 0	106° 3	109° 2	110° 2	113° 2
	25 121° 0	121° 3	120° 0	118° 4	116° 0	114° 2	107° 4	105° 0	102° 2	103° 0	105° 3	109° 4
	26 118° 0	119° 2	119° 8	120° 4	119° 2	113° 8	108° 0	105° 8	105° 0	105° 2	105° 2	106° 0
	27 120° 6	121° 0	119° 4	117° 7	115° 2	112° 8	106° 8	100° 0	100° 0	99° 0	99° 8	103° 1
	28	—	—	—	—	—	—	—	—	—	—	—
	29 119° 8	121° 9	123° 0	119° 6	117° 9	110° 9	108° 4	102° 8	100° 3	100° 0	100° 0	104° 8
	30 123° 6	124° 2	123° 1	125° 2	121° 3	114° 2	108° 4	106° 4	105° 3	104° 8	105° 2	107° 9
Hourly Means	120° 33	121° 15	120° 70	119° 02	116° 09	111° 40	108° 14	104° 85	104° 37	105° 24	106° 32	109° 47

DECLINATION.

Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.

0 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.
Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1'0	113'0	113'2	112'0	112'2	113'4	112'0	112'4	113'2	113'2	112'9	114'7	114'2	113'3	112'20
9'4	110'0	110'0	112'4	115'2	119'7	117'4	117'8	123'2	119'4	117'8	117'0	121'5	124'0	114'13
5'7	101'0	108'2	106'3	113'8	108'4	98'0	119'2	115'4	111'3	115'9	109'0	115'0	116'2	111'41
3'4	103'9	106'0	102'2	113'7	113'2	115'0	112'8	110'0	117'0	117'4	117'0	115'6	116'4	110'73
9'7	111'0	111'2	117'6	111'3	111'8	111'8	111'0	112'2	111'8	110'2	114'0	117'8	118'6	112'76
4'0	106'0	107'2	111'0	112'4	117'0	119'2	121'0	110'2	118'2	108'4	114'2	114'8	115'5	111'92
3'2	107'0	111'2	111'8	110'6	111'2	112'9	118'2	116'3	114'0	112'0	112'4	113'3	115'6	111'70
2'3	107'0	111'0	110'6	110'7	111'2	112'5	112'8	112'8	113'3	114'1	115'0	116'0	116'4	111'37
3'3	105'8	113'3	109'0	107'0	110'2	138'5	112'0	114'2	120'0	114'4	107'0	105'2	107'5	111'81
3'2	107'7	105'0	106'2	104'2	119'8	116'0	115'2	106'4	110'2	113'4	115'5	114'8	102'8	111'74
8'3	108'0	117'0	126'2	114'0	113'4	123'0	116'4	117'2	107'8	113'0	113'0	112'2	115'9	114'24
7'0	109'2	110'4	119'4	115'6	117'8	119'2	115'2	115'0	114'0	113'8	111'8	109'0	117'0	112'61
8'6	110'2	111'0	110'8	111'1	110'2	111'2	112'0	111'0	113'3	112'0	112'1	113'5	116'2	112'33
7'4	107'7	109'8	110'2	110'2	112'0	111'0	111'0	112'4	112'6	112'0	110'4	114'4	115'0	111'98
6'1	108'3	107'3	108'0	115'5	115'0	118'0	118'2	125'0	126'2	111'5	116'0	115'8	118'8	113'50
8'4	109'5	111'5	111'0	112'2	114'5	117'8	125'2	138'4	123'0	115'6	113'8	106'0	116'0	113'68
2'8	116'2	114'8	113'2	111'0	110'0	118'0	117'7	116'0	114'0	112'0	113'8	113'2	116'3	111'41
0'3	113'8	114'3	113'2	111'8	115'8	114'0	113'8	111'5	114'0	105'0	103'8	106'3	114'0	110'35
1'6	113'9	115'4	113'9	112'5	111'9	115'8	114'0	114'0	115'0	114'2	113'0	110'8	129'2	112'90
9'2	112'8	113'8	112'0	111'8	115'0	130'2	118'3	126'0	106'0	109'2	112'4	113'2	110'2	113'50
6'8	107'2	114'6	113'7	111'5	111'2	113'8	120'8	113'0	113'0	112'1	113'0	110'8	113'0	110'36
9'8	110'4	112'4	114'2	113'8	117'6	110'8	111'0	111'0	112'2	112'4	112'4	113'7	112'0	112'00
6'5	111'0	113'2	111'4	112'2	111'0	112'8	111'3	112'2	111'7	110'7	109'3	112'0	117'8	110'41
9'0	112'0	113'8	114'0	112'4	111'9	112'0	111'3	111'3	111'8	112'4	113'2	114'0	116'6	112'45
6'8	109'2	108'2	110'0	109'8	110'4	125'6	126'0	117'0	115'2	115'4	110'2	109'2	115'9	112'52
5'8	115'4	108'0	108'2	107'8	119'8	101'4	126'6	128'0	121'0	112'8	111'8	110'8	116'9	113'76
7'68	109'51	111'22	111'98	111'90	113'59	115'69	116'20	115'88	114'58	112'71	112'53	112'81	115'66	112'23
7'8	109'2	110'4	109'2	110'4	124'3	121'4	123'2	129'2	125'8	124'3	123'6	122'8	116'0	116'95
5'9	108'0	126'0	109'4	109'0	116'9	106'0	115'3	115'8	111'9	120'0	110'8	116'1	118'0	113'82
8'1	115'1	113'2	114'0	110'0	110'0	117'2	118'0	112'5	112'2	107'8	109'2	107'4	115'2	113'72
8'8	111'0	112'0	111'8	111'0	112'0	110'2	110'8	107'8	110'0	119'4	117'6	117'0	118'0	111'81
7'0	113'2	113'0	111'2	110'6	110'2	118'0	120'8	120'2	104'6	113'2	114'8	114'4	117'8	113'61
6'2	108'4	107'6	108'4	108'2	121'2	115'2	113'8	115'4	115'4	113'0	113'8	114'4	119'0	112'00
3'2	106'8	111'0	110'4	107'8	111'5	124'0	119'2	123'7	137'0	123'0	129'0	122'8	122'8	115'96
5'6	107'0	112'8	112'2	115'0	111'2	116'0	117'2	117'0	112'8	112'0	112'5	113'6	116'8	114'51
1'7	105'6	109'8	110'0	110'4	110'4	111'2	111'4	112'5	113'0	115'8	115'0	116'0	113'0	112'05
6'4	108'8	109'8	110'6	110'4	111'1	112'0	113'7	113'0	112'1	114'0	116'1	118'4	123'2	113'15
5'7	110'1	111'8	113'0	113'6	122'2	114'2	113'8	113'3	110'3	110'8	106'9	110'0	109'6	112'95
3'5	109'7	108'8	119'2	114'7	124'0	121'2	122'2	113'8	104'2	104'1	107'4	112'3	117'0	112'68
0'9	111'0	123'0	130'5	117'3	114'0	126'2	114'0	114'2	110'2	109'0	108'0	100'2	114'4	113'90
1'0	113'7	112'6	114'0	112'0	111'0	114'6	113'2	112'5	111'8	112'0	107'0	116'4	113'0	113'40
10'4	112'0	115'4	111'0	115'0	136'2	114'0	112'1	117'0	125'0	119'2	113'8	114'9	113'2	114'69
8'5	110'2	111'2	111'0	111'8	111'0	110'5	110'4	111'0	110'3	108'8	109'1	113'2	117'0	110'93
8'4	111'0	113'0	113'0	112'8	112'6	111'0	112'4	113'2	108'5	108'0	107'4	105'0	126'2	112'12
7'2	110'0	117'3	143'7	118'8	126'0	120'2	113'8	110'7	112'0	108'9	105'4	111'2	106'8	114'97
6'3	111'0	113'2	114'0	115'2	111'0	113'8	116'2	110'2	112'0	112'8	113'0	103'0	109'0	111'90
10'2	113'2	114'4	114'4	112'7	113'1	112'2	112'5	111'9	112'6	111'2	111'6	101'6	118'8	111'77
5'3	109'4	111'8	118'7	116'2	117'4	116'2	116'0	112'8	111'0	108'7	111'0	111'0	114'2	112'84
5'2	106'9	107'0	110'2	111'9	117'0	114'6	112'7	110'3	116'0	116'2	115'8	116'2	120'0	113'10
9'8	103'1	107'2	109'6	106'3	111'2	109'0	112'2	112'0	116'4	113'4	112'8	108'6	116'8	110'45
10'0	104'8	108'0	108'3	110'4	129'4	116'5	117'4	118'2	118'0	115'0	115'8	113'4	113'4	113'12
5'2	107'9	108'8	110'0	110'2	109'8	126'4	125'0	116'0	115'8	111'0	113'9	114'8	117'6	114'54
6'32	109'47	112'29	113'82	113'41	116'30	115'88	115'63	114'75	113'87	113'14	112'75	112'67	116'42	113'25

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JULY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	119° 0	121° 0	121° 1	123° 0	120° 0	111° 6	111° 2	108° 2	105° 8	103° 8	104° 4	108° 7
	2	112° 0	128° 2	123° 0	123° 8	118° 0	114° 8	109° 2	106° 7	104° 5	104° 8	105° 9
	3	118° 2	117° 4	119° 4	116° 4	113° 8	115° 7	111° 4	109° 9	107° 1	107° 7	109° 7
	4	130° 4	115° 2	115° 0	117° 4	115° 5	112° 8	108° 8	108° 5	106° 2	105° 0	107° 0
	5	—	—	—	—	—	—	—	—	—	—	—
	6	114° 0	123° 0	123° 5	125° 0	116° 0	109° 9	99° 2	104° 0	103° 2	104° 0	107° 0
	7	121° 0	126° 0	130° 0	119° 8	120° 0	115° 0	107° 2	106° 8	113° 2	106° 8	105° 0
	8	117° 0	118° 4	122° 4	118° 0	118° 0	114° 2	108° 0	106° 2	104° 2	104° 6	105° 5
	9	116° 0	121° 8	125° 0	124° 2	121° 2	112° 2	111° 3	108° 3	110° 0	102° 2	104° 4
	10	122° 0	123° 1	123° 0	119° 8	119° 8	114° 2	111° 4	104° 8	102° 0	106° 2	106° 0
	11	132° 8	123° 6	117° 0	108° 0	110° 6	117° 0	114° 2	108° 6	98° 0	103° 8	108° 8
	12	—	—	—	—	—	—	—	—	—	—	—
	13	114° 0	120° 0	124° 4	122° 2	119° 0	110° 8	106° 8	104° 0	109° 2	109° 8	108° 0
	14	117° 4	119° 0	118° 2	118° 4	116° 0	110° 8	107° 0	104° 8	107° 4	106° 9	105° 8
	15	115° 0	124° 2	124° 4	124° 8	118° 6	118° 2	109° 2	109° 4	106° 9	109° 6	108° 8
	16	115° 5	112° 5	120° 0	117° 4	116° 5	108° 0 ^a	105° 0	106° 7	109° 0	107° 0	110° 0
	17	121° 0	124° 0	123° 4	120° 4	115° 0	110° 0	109° 0	105° 4	107° 0	107° 8	108° 0
	18	115° 7	123° 0	117° 3	116° 4	114° 0	106° 6	103° 8	101° 2	104° 6	108° 0	114° 9
	19	—	—	—	—	—	—	—	—	—	—	—
	20	117° 0	121° 0	120° 2	118° 6	114° 9	110° 5	109° 2	109° 4	108° 8	107° 0	108° 0
	21	119° 2	121° 0	122° 8	123° 8	118° 5	117° 0	114° 0	109° 0	107° 0	107° 5	107° 1
	22	120° 8	120° 0	119° 0	118° 8	114° 8	109° 5	106° 2	100° 9	105° 3	107° 5	108° 2
	23	120° 2	124° 4	123° 5	116° 4	114° 1	106° 9	107° 0	105° 2	104° 0	105° 5	109° 0
	24	121° 0	124° 2	124° 8	121° 8	120° 5	109° 8	110° 9	106° 2	95° 4	97° 0	99° 4
	25	119° 2	124° 4	122° 2	118° 8	122° 5	117° 8	111° 8	111° 8	105° 3	105° 5	112° 0
	26	—	—	—	—	—	—	—	—	—	—	—
	27	123° 3	124° 4	125° 6	121° 3	118° 5	111° 4	107° 2	102° 0	103° 0	100° 0	103° 0
	28	119° 8	123° 2	124° 1	120° 7	113° 1	106° 4	103° 7	102° 0	103° 9	104° 5	105° 0
	29	127° 0	128° 0	119° 2	118° 0	108° 8	103° 6	95° 2	105° 0	102° 2	108° 6	106° 6
	30	111° 2	111° 0	119° 8	120° 4	117° 0	108° 2	107° 4	110° 0	103° 8	99° 6	97° 8
	31	119° 8	122° 4	117° 8	113° 0	114° 5	107° 8	105° 2	101° 8	105° 4	106° 0	105° 0
Hourly Means	119° 24	121° 64	121° 70	119° 50	116° 64	111° 51	108° 11	106° 34	105° 46	105° 40	106° 56	109° 10
AUGUST.	1	119° 2	124° 0	115° 8	111° 0	111° 0	109° 2	107° 4	103° 0	102° 2	105° 9	104° 1
	2	—	—	—	—	—	—	—	—	—	—	—
	3	120° 8	122° 8	119° 2	119° 9	117° 2	109° 2	110° 2	105° 0	106° 2	107° 0	110° 2
	4	121° 3	125° 5	122° 7	121° 3	116° 0	111° 0	105° 7	105° 0	104° 2	104° 8	107° 0
	5	119° 0	122° 0	121° 8	117° 0	108° 8	111° 0	103° 0	100° 0	103° 0	106° 2	108° 8
	6	121° 1	125° 0	124° 8	118° 0	110° 2	111° 0	106° 8	102° 6	102° 8	104° 2	104° 8
	7	110° 8	120° 2	123° 2	123° 7	117° 2	114° 2	115° 3	109° 4	105° 2	115° 8	112° 0
	8	110° 8	111° 5	122° 2	120° 9	122° 5	118° 0	112° 8	109° 0	110° 8	113° 8	108° 8
	9	—	—	—	—	—	—	—	—	—	—	—
	10	109° 6	112° 0	120° 4	122° 7	118° 3	114° 8 ^b	106° 0	103° 8	102° 2	103° 0	106° 0
	11	118° 0	121° 9	123° 0	126° 0	120° 8	116° 6	111° 0	104° 2	104° 8	106° 0	104° 2
	12	118° 0	119° 2	119° 0	112° 2	107° 0	101° 4	102° 4	107° 0	108° 2	112° 0	107° 6
	13	114° 2	100° 2	103° 8	106° 0	107° 6	105° 5	107° 2	104° 8	105° 4	109° 8	110° 0
	14	118° 2	129° 0	119° 0	106° 7	100° 6	98° 2	106° 0	105° 5	102° 0	102° 0	102° 9
	15	104° 8	115° 8	116° 9	113° 0	113° 0	109° 8	105° 3	104° 8	104° 0	108° 0	110° 0
	16	—	—	—	—	—	—	—	—	—	—	—
	17	122° 8	125° 3	124° 8	122° 0	116° 0	114° 0	106° 0	102° 5	104° 2	104° 2	106° 0
	18	117° 0	122° 4	121° 8	122° 0	116° 0	113° 4	103° 0	102° 0	103° 5	104° 6	110° 2
	19	111° 4	121° 8	121° 2	120° 4	111° 0	106° 0	100° 4	101° 2	100° 0	104° 8	107° 3
	20	118° 6	118° 2	118° 8	114° 0	108° 2	106° 2	101° 8	99° 0	100° 9	106° 0	108° 0
	21	121° 0	120° 6	120° 6 ^d	120° 6	110° 3	106° 8	104° 3	107° 0	103° 8	102° 0	103° 0
	22	125° 5	126° 0	127° 2	122° 4	114° 2	103° 0	103° 0	98° 8	98° 6	101° 4	101° 8
	23	—	—	—	—	—	—	—	—	—	—	—
	24	120° 2	125° 0	128° 0	130° 2	118° 1	119° 2	108° 8	105° 2	100° 0	99° 3	104° 0
	25	119° 2	116° 5	119° 8	123° 3	113° 6	107° 8	104° 6	101° 8	105° 4	106° 2	108° 0
	26	119° 5	123° 0	127° 2	124° 8	115° 8	109° 4	104° 0	103° 0	102° 2	104° 3	107° 2
	27	113° 0	119° 4	122° 0	118° 2	112° 8	106° 8	103° 0	104° 0	100° 4	100° 0	109° 6
	28	121° 8	124° 5	125° 5	123° 4	117° 0	103° 0	100° 0	98° 8	99° 2	102° 2	119° 0
	29	117° 2	121° 2	121° 4	116° 0	116° 0	113° 5	113° 3	107° 0	102° 8	104° 0	107° 4
	30	—	—	—	—	—	—	—	—	—	—	—
	31	118° 4	120° 0	118° 4	116° 5	115° 6	109° 7	104° 5	102° 8	104° 2	106° 0	110° 0
Hourly Means	117° 36	120° 62	121° 07	118° 93	113° 65	109° 57	106° 00	103° 74	103° 32	105° 47	107° 62	110° 07

^a Four minutes late.^b Fourteen minutes late.^c Ten minutes late.^d Five minutes late.

DECLINATION.

Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
111° 8	109° 4	121° 7	114° 0	111° 2	111° 9	109° 5	118° 2	119° 0	113° 2	125° 3	118° 6	114° 23
114° 8	112° 0	111° 2	118° 8	121° 9	122° 0	120° 2	123° 3	123° 0	124° 4	131° 2	119° 2	116° 98
110° 9	113° 0	114° 9	126° 0	128° 6	132° 6	117° 0	115° 8	117° 0	121° 8	123° 0	123° 8	116° 90
109° 0	111° 2	107° 8	107° 2	117° 4	117° 6	—	—	—	—	—	—	—
112° 2	112° 6	123° 8	105° 7	113° 9	122° 0	121° 9	117° 0	116° 8	115° 4	113° 1	119° 0	114° 11
111° 0	119° 8	115° 0	111° 2	112° 0	107° 0	121° 8	114° 0	113° 7	113° 9	113° 2	110° 4	114° 26
112° 0	111° 0	110° 7	117° 0	116° 8	115° 2	116° 2	116° 6	112° 2	110° 0	114° 6	117° 0	113° 19
111° 0	112° 2	110° 4	112° 2	111° 6	112° 2	115° 0	117° 4	115° 3	116° 2	110° 5	120° 8	113° 70
108° 4	109° 8	118° 8	114° 0	112° 2	1° 5	112° 0	110° 6	114° 4	120° 2	131° 0	141° 8	115° 17
114° 8	109° 8	114° 2	126° 6	126° 5	121° 0	—	—	—	—	—	—	—
114° 2	119° 1	119° 0	112° 5	114° 1	113° 0	116° 0	115° 8	113° 0	105° 0	92° 3	100° 0	112° 33
112° 8	107° 4	115° 8	118° 2	115° 2	118° 7	138° 0	137° 0	120° 2	114° 0	111° 4	107° 4	114° 70
112° 4	112° 5	113° 4	112° 4	119° 0	117° 2	115° 2	112° 0	114° 4	114° 0	114° 0	116° 0	114° 61
113° 7	116° 0	114° 8	116° 4	112° 0	112° 8	112° 0	114° 8	116° 8	106° 0	104° 0	119° 8	112° 40
113° 0	113° 0	111° 6	111° 7	112° 1	119° 2	113° 0	112° 0	110° 8	110° 0	110° 0	115° 0	113° 11
112° 6	116° 8	123° 6	119° 0	114° 8	111° 2	—	—	—	—	—	—	—
111° 0	112° 0	123° 0	117° 0	115° 0	112° 0	121° 6	107° 0	107° 4	108° 2	109° 0	108° 4	112° 77
111° 0	111° 0	111° 8	112° 0	114° 0	121° 0	130° 2	125° 4	114° 4	113° 2	111° 4	114° 0	115° 25
110° 2	110° 4	111° 4	111° 7	112° 4	112° 0	113° 2	116° 0	118° 0	115° 0	107° 6	115° 4	112° 23
113° 8	114° 2	113° 0	112° 8	115° 2	112° 7	112° 0	112° 0	113° 0	113° 6	115° 0	118° 0	113° 02
104° 8	104° 0	111° 2	108° 2	111° 5	118° 0	117° 2	111° 4	111° 0	109° 8	105° 0	116° 4	110° 85
105° 0	118° 5	112° 0	116° 2	114° 2	114° 0	—	—	—	—	—	—	—
110° 0	112° 2	119° 0	114° 7	117° 4	110° 0	120° 2	117° 4	112° 5	108° 4	114° 2	116° 4	113° 38
107° 2	109° 2	111° 2	112° 0	113° 2	114° 0	111° 2	112° 5	115° 0	116° 6	118° 8	118° 0	112° 30
110° 2	122° 2	109° 4	110° 5	112° 2	111° 6	114° 8	117° 0	112° 5	108° 8	112° 0	115° 0	112° 03
103° 0	110° 6	108° 0	132° 7	117° 3	121° 6	110° 2	107° 0	114° 3	115° 5	113° 5	116° 2	111° 39
110° 0	112° 8	109° 8	104° 2	115° 2	118° 0	104° 6	113° 0	105° 8	100° 0	109° 8	118° 0	110° 32
110° 77	112° 69	114° 31	114° 62	115° 44	116° 15	115° 99	115° 43	113° 52	112° 47	113° 49	117° 11	113° 47
114° 8	122° 2	115° 5	109° 2	111° 0	107° 2	—	—	—	—	—	—	—
112° 2	112° 2	129° 0	116° 2	112° 4	110° 8	105° 2	112° 0	110° 4	112° 8	113° 4	115° 0	111° 20
112° 8	112° 4	110° 8	112° 0	113° 8	111° 8	111° 0	111° 0	112° 2	113° 2	114° 5	113° 0	113° 74
111° 2	120° 4	112° 3	110° 8	108° 2	111° 1	109° 2	112° 3	117° 2	122° 8	122° 0	122° 4	112° 97
110° 0	118° 0	132° 0	170° 0	140° 0	131° 4	122° 2	110° 2	104° 2	94° 3	106° 7	108° 2	116° 17
111° 0	116° 2	110° 6	113° 0	130° 0	114° 2	122° 0	79° 4	121° 8	117° 8	113° 0	99° 5	113° 52
112° 0	130° 0	120° 0	114° 8	117° 6	124° 2	—	—	—	—	—	—	—
109° 2	110° 0	114° 6	119° 2	117° 2	111° 2	116° 2	113° 8	120° 4	114° 0	112° 0	115° 7	112° 56
117° 2	116° 4	118° 2	123° 6	121° 2	110° 0	113° 7	109° 8	111° 4	111° 9	112° 8	112° 0	114° 34
112° 0	108° 0	110° 7	124° 1	115° 7	121° 9	120° 6	120° 0	120° 2	118° 0	114° 0	113° 4	113° 64
113° 6	111° 8	113° 2	118° 0	114° 2	130° 4	129° 0	123° 0	127° 2	118° 8	107° 0	111° 2	112° 66
109° 8	109° 2	113° 6	150° 4	124° 5	128° 4	88° 6	105° 5	92° 0	119° 3	109° 6	100° 8	110° 42
142° 8	122° 8	117° 0	117° 6	119° 4	110° 5	—	—	—	—	—	—	—
111° 2	113° 2	122° 2	128° 0	117° 9	111° 0	125° 0	122° 0	116° 5	110° 2	110° 0	113° 8	114° 25
113° 8	115° 9	126° 9	120° 8	116° 0	119° 0	112° 3	112° 0	112° 2	111° 0	109° 0	111° 2	113° 69
111° 8	110° 0	112° 8	120° 2	112° 6	111° 3	111° 0	101° 2	113° 8	113° 4	115° 0	115° 4	111° 01
113° 2	111° 2	111° 0	110° 0	111° 2	109° 8	110° 6	111° 2	110° 2	114° 0	109° 8	118° 0	110° 53
111° 8	110° 0	108° 8	109° 0	117° 0	113° 3	112° 6	115° 2	112° 8	114° 8	116° 8	120° 3	112° 21
108° 2	110° 9	112° 2	108° 2	110° 0	115° 8	—	—	—	—	—	—	—
120° 0	107° 0	114° 1	130° 0	123° 3	118° 0	111° 2	114° 0	112° 0	114° 0	116° 0	118° 2	111° 81
122° 8	111° 3	116° 0	115° 2	113° 2	114° 6	116° 0	111° 2	111° 0	108° 0	103° 2	115° 0	112° 0
113° 0	111° 2	111° 2	112° 0	113° 5	127° 3	121° 8	116° 8	112° 1	113° 1	114° 3	114° 0	113° 87
116° 0	108° 1	109° 2	112° 0	111° 0	118° 5	108° 8	102° 0	112° 0	120° 0	109° 0	119° 0	110° 99
105° 2	107° 0	109° 9	120° 0	135° 4	112° 2	111° 0	108° 9	106° 6	110° 2	104° 2	110° 0	112° 22
109° 1	107° 5	106° 4	109° 7	109° 8	113° 0	—	—	—	—	—	—	—
109° 0	111° 3	123° 4	120° 2	114° 8	111° 0	123° 4	120° 0	116° 4	112° 2	109° 0	112° 2	112° 43
112° 44	113° 24	115° 45	119° 78	117° 34	116° 07	115° 91	113° 09	113° 22	112° 91	111° 83	113° 14	112° 94

114° 36

112° 95

113° 22

112° 61

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen } Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
SEPTEMBER.	1	Sc. Div. 116°9	Sc. Div. 121°2	Sc. Div. 120°3	Sc. Div. 114°8	Sc. Div. 111°6	Sc. Div. 105°0	Sc. Div. 101°9	Sc. Div. 101°0	Sc. Div. 103°8	Sc. Div. 104°8	Sc. Div. 108°5	Sc. Div. 110°4
	2	119°0	120°5	120°3	116°2	109°8	105°0	102°2	102°2	103°8	107°2	109°2	111°4
	3	120°0	123°0	122°7	118°0	111°0	104°0	100°2	100°2	102°6	106°4	110°0	111°1
	4	98°0	117°0	111°0	121°2	108°9	101°4	99°0	99°8	102°0	104°8	108°1	120°6
	5	129°0	111°4	116°0	113°1	105°8	99°1	104°6	102°0	101°0	110°7	114°9	105°0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	116°6	121°0	118°4	116°8	113°2	108°1	104°1	109°2	107°2	111°1	114°1	115°1
	8	116°8	115°0	110°8	111°3	113°0	109°0	105°3	105°0	111°0	114°8	111°8	111°0
	9	119°0	124°0	120°3	114°7	110°2	107°0	102°8	102°0	104°0	109°6	113°5	116°2
	10	116°0	118°6	120°0	118°2	110°2	100°8	98°6	103°4	98°8	98°8	101°8	108°0
	11	83°4	111°5	111°6	108°8	101°0	104°3	100°0	100°7	103°4	108°9	117°5	121°0
	12	112°7	115°4	115°1	111°9	104°0	100°0	102°8	105°0	112°8	110°0	117°0	118°0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	122°8	119°9	112°2	113°0	106°0	101°2 ^b	101°0	100°0	104°8	109°0	114°0	111°8
	15	112°0	109°6	119°0	115°4	106°9	103°2	102°8	103°0	107°2	113°0	115°2	119°1
	16	118°2	120°2	115°5	113°8	112°0	108°7	107°8	107°6	109°2	111°2	112°4	112°1
	17	125°2	124°8	122°0	116°5	111°5	108°3	104°2	102°3	104°8	108°8	114°8	112°8
	18	116°4	119°6	119°1	118°0	113°1	108°0	103°2	102°8	104°1	107°8	111°3	113°0
	19	118°0	116°0	118°8	116°0	115°0	108°9	104°0	102°2	101°0	100°2	102°0	103°2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	123°0	126°0	123°0	121°4	117°0	112°2	107°4	103°0	104°2	99°6	95°5	105°8
	22	87°2	90°2	73°0	82°4	99°2	96°7	109°5	117°1	106°6	110°8	99°3	116°0
	23	111°4	113°5	119°0	116°7	112°2	109°9	101°0	103°0	102°9	103°5	103°5	104°6
	24	116°8	121°0	119°0	116°3	111°0	106°2	103°8	101°5	101°2	106°5	104°6	106°0
	25	117°0	120°5	118°9	123°0	111°8	109°0	106°0	102°2	102°0	105°0	107°2	110°0
	26	118°2	121°0	119°6	118°0	115°2	111°0	107°0	105°0	101°4	106°4	109°2	110°5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	118°5	117°8	116°6	117°6	113°0	108°4	104°0	109°8	107°2	107°2	109°1	110°0
	29	115°4	117°2	116°8	114°1	111°8	110°1	106°8	106°7	106°0	105°8	107°8	108°5
	30	114°6	115°0	116°2	119°0	113°4	111°2	104°5	105°0	106°0	105°4	103°0	106°4
Hourly Means		114°85	117°34	115°97	114°85	110°30	106°03	103°75	103°91	101°69	107°20	109°05	111°64
OCTOBER.	1	116°2	120°0	117°8	110°8	109°7	104°3	107°2	107°0	106°3	110°4	111°8	113°0
	2	104°8	113°1	110°3	105°4	109°2	108°0	105°2	106°4	104°6	101°7	107°1	102°7
	3	121°0	120°0	120°2	118°6	118°0	113°8	109°2	101°9	105°8	108°6	109°8	110°8
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	116°2	117°2	118°4	111°0	107°2	106°1	104°0	103°5	105°5	109°2	111°8	112°2
	6	114°4	111°3	116°0	114°2	110°3	105°0	101°2	102°0	103°8	108°0	110°0	110°8
	7	116°0	121°8	122°2	120°0	108°3	106°2	100°7	99°3	104°2	107°2	104°2	99°2
	8	116°3	73°5	95°5	111°0	104°0	102°0	102°8	100°8	102°4	109°2	111°2	114°2
	9	113°4	114°2	117°0	117°4	114°2	110°4	106°4	101°0	100°8	101°2	108°8	108°9
	10	104°3	98°8	100°4	103°3	105°6	108°0	105°0	103°8	101°7	105°7	111°0	111°8
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	119°0	113°1	102°2	106°4	109°6	111°0 ^d	109°5	111°0	108°0	109°7	111°8	113°0
	13	113°0	115°5	116°2	116°5	114°0	108°8	106°9	108°0	108°0	109°6	116°6	111°0
	14	115°6	116°0	117°1	117°4	113°0	107°8	107°0	107°5	110°0	111°8	112°9	112°2
	15	115°0	115°6	118°0	117°2	115°3	111°0	106°8	107°0	108°8	111°1	111°6	112°5
	16	118°8	117°0	116°6	117°0	111°5	108°3	107°8	109°4	110°8	111°8	111°7	111°0
	17	117°9	117°9	117°0	117°0	113°0	109°2	105°8	106°0	103°0	109°0	111°1	111°0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	115°7	115°5	117°8	120°0	119°0 ^e	114°0	105°8	103°0	106°4	106°0	106°0	105°2
	20	118°2	121°2	123°0	121°2	119°8	109°4	107°6	106°0	106°8	107°8	109°2	110°1
	21	114°0	114°8	120°0	119°8	119°1	112°5	109°8	107°4	108°0	110°5	108°9	114°0
	22	116°3	119°1	114°0	108°7	114°0	110°2	108°8	103°0	103°5	107°6	112°5	110°3
	23	118°8	118°1	117°2	119°7	118°5	114°0	109°9	107°2	107°0	109°0	110°0	112°0
	24	115°2	116°9	119°0	120°0	117°8	112°5	110°0	110°7	106°4	107°2	108°2	110°4
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	110°2	115°0	119°0	119°2	119°8	115°0	109°4	107°0	105°2	107°4	108°9	110°9
	27	115°0	117°2	118°7	121°8	118°2	116°0	111°0	109°0	106°1	108°1	108°6	108°2
	28	115°4	115°6	116°6	118°8	116°8	115°6	110°8	108°7	107°8	108°3	111°2	111°0
	29	114°2	113°5	117°5	117°1	118°6	114°8	112°0	108°6	106°4	108°0	108°7	110°6
	30	108°2	111°0	100°0	111°0	115°0	111°0	113°0	111°4	110°4	112°0	112°0	112°8
	31	109°7	112°0	116°2	114°4	112°0	112°0	110°2	109°0	111°2	111°7	111°8	112°2
November 1		—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		114°37	114°00	114°96	115°37	113°76	110°37	107°55	106°37	106°44	108°55	110°27	104°44

^a Forty minutes late.^b Eighteen minutes late.^c Four minutes late.

DECLINATION.														
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.														
		12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.
Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
5	110° 4	113° 2	111° 2	110° 7	110° 5	116° 0	111° 4	118° 2	114° 7	114° 2	112° 8	112° 0	116° 5	111° 73
2	111° 4	111° 0	109° 8	110° 4	109° 5	111° 1	111° 1	113° 1	117° 2	115° 0	119° 8	115° 8	118° 0	112° 03
0	111° 1	110° 2	108° 0	106° 5	108° 7	108° 2	108° 8	120° 2	112° 7	125° 0	109° 0	124° 0	114° 2	111° 86
1	120° 6	110° 8	111° 8	125° 9	110° 0	118° 0	109° 8	113° 3	112° 8	110° 0	104° 0	100° 0	110° 0	109° 51
9	105° 0	153° 2	120° 0	133° 8	125° 0	115° 4	117° 2	—	—	—	—	—	—	113° 93
1	115° 1	115° 3	112° 5	111° 2	112° 0	110° 0	110° 5	112° 2	115° 0	112° 7	111° 3	120° 0	115° 0	113° 02
8	111° 0	113° 4	111° 8	112° 5	111° 0	110° 6	108° 1	110° 4	110° 4	113° 3	112° 2	112° 5	115° 9	111° 54
5	116° 2	115° 8	113° 0	112° 2	110° 9	108° 9	107° 0	107° 8	108° 9	112° 3	115° 7	117° 7	116° 0	112° 06
8	108° 0	115° 8	112° 0	110° 8	—	113° 9	112° 4	109° 0	121° 2	123° 2	123° 0	128° 4	123° 8	112° 47
5	121° 0	112° 2	152° 2	118° 7	116° 2	118° 8	120° 8	102° 0	108° 8	108° 6	102° 2	113° 4	119° 3	111° 05
0	118° 0	114° 0	110° 2	122° 0	112° 4	112° 0	110° 4	—	—	—	—	—	—	112° 84
2	111° 8	115° 0	121° 8	111° 4	113° 3	123° 5	121° 2	109° 4	120° 8	118° 0	121° 2	111° 0	120° 2	113° 44
2	119° 1	113° 8	113° 0	112° 3	111° 0	111° 3	112° 2	113° 0	114° 0	114° 0	115° 7	115° 5	115° 0	111° 97
4	112° 1	111° 2	112° 8	125° 0	115° 2	113° 3	112° 0	114° 0	115° 0	117° 0	113° 6	108° 8	122° 7	113° 72
8	112° 8	112° 9	116° 3	115° 0	112° 2	112° 0	112° 4	115° 0	113° 2	115° 0	104° 4	117° 0	121° 8	113° 47
3	113° 0	111° 2	113° 0	112° 8	112° 4	118° 2	115° 0	113° 2	113° 2	114° 3	113° 1	115° 0	118° 0	112° 74
0	163° 2	111° 4	113° 0	112° 8	113° 8	113° 0	114° 5	—	—	—	—	—	—	112° 04
5	105° 8	108° 2	120° 1	107° 4	101° 1	116° 6	121° 4	117° 7	136° 2	131° 6	137° 0	155° 2	101° 2	116° 32
3	116° 0	127° 0	113° 2	114° 0	121° 5	122° 9	124° 0	126° 0	114° 0	110° 0	112° 6	113° 4	114° 8	108° 39
5	104° 6	99° 3	107° 0	108° 5	107° 8	118° 8	112° 7	109° 0	112° 0	117° 1	117° 8	116° 8	117° 7	110° 53
6	106° 0	108° 4	109° 2	110° 2	111° 0	112° 0	112° 4	113° 0	112° 8	114° 2	114° 4	116° 5	116° 3	111° 01
2	110° 0	113° 2	111° 2	112° 2	125° 0	117° 8	113° 2	105° 0	109° 7	118° 0	109° 0	119° 0	116° 4	112° 60
2	110° 5	115° 4	111° 8	111° 1	111° 5	113° 0	115° 0	—	—	—	—	—	—	112° 93
1	110° 0	123° 0	113° 3	109° 3	112° 0	112° 8	113° 0	113° 0	113° 2	113° 6	113° 0	111° 0	114° 8	112° 67
8	108° 5	109° 0	113° 1	114° 0	110° 3	111° 5	112° 6	112° 0	113° 5	112° 8	115° 0	115° 0	113° 1	111° 62
0	106° 4	109° 0	105° 8	106° 0	106° 0	108° 8	112° 2	115° 0	123° 5	122° 0	117° 2	107° 2	116° 1	111° 19
05	111° 64	114° 34	114° 12	113° 72	112° 41	114° 17	113° 51	112° 52	113° 83	115° 91	114° 87	116° 74	116° 54	112° 19
8	113° 0	124° 6	122° 2	111° 0	113° 3	112° 2	111° 5	111° 2	112° 0	105° 0	110° 9	115° 1	107° 5	112° 12
1	102° 7	100° 2	112° 1	128° 2	139° 7	122° 0	123° 2	112° 0	119° 4	123° 6	122° 4	126° 5	126° 0	113° 91
8	110° 8	110° 0	111° 2	112° 0	112° 1	112° 0	111° 9	—	—	—	—	—	—	113° 21
0	112° 2	113° 0	113° 5	113° 1	112° 2	112° 3	111° 8	113° 0	113° 0	114° 2	113° 3	115° 2	115° 0	111° 82
8	110° 8	120° 8	113° 8	115° 0	116° 8	115° 4	119° 2	120° 0	119° 2	117° 0	110° 0	114° 0	113° 1	112° 55
2	99° 2	111° 2	111° 8	116° 0	152° 0	126° 6	118° 2	138° 8	112° 0	110° 0	119° 0	122° 0	117° 0	115° 12
2	114° 2	119° 0	121° 6	114° 1	115° 0	113° 1	120° 0	116° 2	118° 0	105° 2	113° 2	115° 3	115° 0	109° 52
8	108° 9	123° 8	119° 0	122° 8	124° 1	123° 0	133° 4	128° 6	141° 8	117° 0	108° 4	128° 8	118° 6	117° 17
0	111° 8	111° 2	112° 0	112° 0	110° 4	110° 8	111° 0	—	—	—	—	—	—	108° 78
8	113° 0	119° 2	116° 0	113° 2	112° 2	108° 8	111° 8	112° 8	113° 9	112° 6	113° 1	115° 0	113° 0	111° 94
6	111° 0	113° 0	121° 4	112° 2	127° 5	116° 6	113° 1	113° 2	112° 8	117° 0	116° 0	115° 7	114° 0	114° 03
9	112° 2	112° 1	117° 5	113° 0	111° 7	112° 0	113° 0	113° 3	113° 3	113° 2	114° 0	113° 8	114° 0	112° 88
6	112° 5	112° 1	112° 0	112° 7	110° 0	130° 0	125° 6	115° 3	122° 0	115° 2	110° 0	103° 4	120° 4	114° 11
7	111° 0	110° 3	110° 7	118° 2	111° 2	112° 0	112° 4	112° 0	114° 2	114° 0	117° 5	116° 5	117° 8	113° 27
1	111° 0	111° 8	111° 2	113° 2	117° 0	114° 0	114° 0	—	—	—	—	—	—	112° 82
0	105° 2	109° 2	105° 8	122° 4	115° 0	144° 0	121° 2	113° 8	110° 0	112° 8	112° 8	114° 7	117° 0	113° 88
2	110° 4	113° 2	113° 3	111° 7	113° 2	113° 2	113° 0	112° 2	114° 0	114° 0	113° 4	114° 2	114° 4	113° 34
9	114° 0	113° 9	112° 0	113° 9	113° 3	113° 6	124° 2	111° 0	111° 2	113° 2	115° 2	106° 2	110° 2	114° 03
5	110° 3	126° 8	110° 2	114° 5	115° 8	111° 0	112° 2	116° 2	111° 4	108° 2	105° 4	111° 2	112° 0	111° 79
0	112° 0	112° 4	113° 0	113° 8	112° 2	113° 8	122° 8	116° 6	113° 2	111° 0	113° 3	114° 7	115° 0	113° 88
2	110° 4	108° 2	113° 4	117° 0	126° 6	115° 2	116° 2	—	—	—	—	—	—	113° 50
9	110° 9	112° 0	112° 6	113° 2	113° 7	114° 9	116° 3	112° 8	113° 8	114° 1	112° 0	112° 3	112° 0	112° 78
6	108° 2	111° 2	112° 0	113° 0	114° 2	116° 0	115° 2	112° 2	111° 2	112° 6	113° 2	113° 7	115° 2	113° 23
2	111° 0	111° 8	112° 0	119° 0	113° 0	115° 0	115° 4	117° 2	112° 0	113° 2	117° 8	115° 0	118° 1	114° 00
7	110° 6	112° 2	113° 4	113° 0	118° 6	111° 2	115° 8	115° 6	117° 6	113° 0	115° 5	115° 2	116° 4	113° 77
0	112° 8	113° 8	111° 8	116° 4	119° 4	120° 6	118° 9	115° 6	107° 8	115° 5	115° 0	111° 1	115° 0	112° 99
8	112° 2	112° 2	112° 4	113° 0	113° 7	113° 2	113° 3	—	—	—	—	—	—	113° 02
27	101° 44	113° 67	113° 63	115° 06	117° 55	117° 24	116° 84	115° 66	114° 95	113° 59	113° 58	114° 80	115° 06	113° 09

* Twenty-five minutes late.

Three minutes late.

C 2



DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
NOVEMBER.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	114° 0	112° 8	100° 0	100° 0	111° 4	104° 2	103° 2	107° 7	106° 2	106° 2	112° 2	107° 1
	114° 2	113° 4	105° 8	110° 6	114° 4	113° 1	110° 6	110° 2	110° 2	111° 0	110° 9	109° 9
	111° 0	114° 2	115° 1	115° 2	113° 8	110° 8	108° 8	107° 8	109° 0	111° 0	111° 6	111° 2
	114° 3	116° 0	117° 0	118° 0	116° 8	111° 0	106° 8	104° 2	106° 7	109° 0	111° 0	111° 5
	116° 0	114° 8	118° 2	120° 4	118° 0	112° 0	109° 2	106° 2	106° 2	108° 4	108° 8	110° 8
	116° 2	117° 2	121° 0	120° 8	120° 2	117° 4	112° 8	108° 8	106° 8	103° 0	102° 3	109° 2
	—	—	—	—	—	—	—	—	—	—	—	—
	112° 8	114° 8	114° 0	113° 6	115° 1	113° 1	109° 0	107° 9	107° 5	107° 4	110° 0	110° 2
	111° 3	114° 6	116° 2	120° 0	118° 5	115° 2	110° 8	108° 8	108° 0	108° 2	109° 2	110° 0
	114° 2	114° 2	116° 8	118° 8	116° 9	112° 3	108° 2	107° 0	109° 2	107° 0	104° 8	109° 2
	115° 0	115° 7	117° 8	119° 8	120° 8	118° 2	113° 4	110° 0	109° 2	109° 2	108° 8	110° 6
	114° 8	115° 0	118° 2	120° 0	117° 4	113° 6	110° 0	108° 0	107° 0	108° 4	109° 2	108° 0
	114° 2	115° 2	117° 4	118° 1	116° 5	113° 1	110° 6	108° 0	108° 3	110° 0	109° 0	110° 8
	—	—	—	—	—	—	—	—	—	—	—	—
	114° 2	115° 3	115° 6	115° 8	113° 9	112° 0	110° 8	110° 4	110° 3	108° 6	109° 0	109° 4
	115° 3	115° 7	115° 4	113° 0	110° 0	109° 6	110° 1	99° 0	84° 0	94° 0	98° 0	108° 2
	120° 0	117° 0	117° 4	116° 0	105° 0	105° 0	109° 2	108° 0	108° 8	109° 9	109° 5	109° 2
	114° 0	115° 0	115° 7	115° 0	112° 0	110° 0	105° 2	105° 8	108° 0	111° 0	111° 2	112° 0
	116° 0	117° 4	118° 4	119° 2	116° 0	109° 8	107° 9	107° 8	108° 0	108° 8	106° 8	127° 0
	115° 4	116° 2	115° 4	121° 0	116° 0	115° 8	111° 9	107° 8	108° 0	109° 0	111° 0	111° 7
	—	—	—	—	—	—	—	—	—	—	—	—
	114° 0	114° 2	118° 1	120° 6	118° 4	114° 8	111° 3	109° 2	109° 2	110° 0	109° 8	111° 4
	115° 5	114° 2	118° 0	118° 0	116° 2	111° 0	110° 0	108° 2	108° 4	109° 2	109° 4	111° 9
	114° 0	114° 2	118° 0	120° 2	118° 0	115° 4	111° 2	108° 0	107° 6	110° 1	111° 3	113° 1
	118° 8	122° 0	121° 8	121° 5	99° 9	105° 6	109° 5	105° 0	107° 8	110° 8	110° 7	109° 2
	117° 1	111° 4	107° 6	104° 9	114° 0	113° 0	111° 7	108° 8	109° 0	108° 4	112° 0	110° 0
	111° 0	113° 1	114° 4	118° 8	117° 1	115° 5	109° 1	111° 9	105° 2	108° 0	108° 8	118° 0
	—	—	—	—	—	—	—	—	—	—	—	—
	109° 8	109° 9	112° 6	108° 2	112° 0	112° 2	113° 0	110° 2	109° 0	111° 0	112° 1	113° 6
Hourly Means	114° 64	114° 94	115° 44	116° 42	114° 73	112° 15	109° 77	107° 43	107° 10	108° 30	109° 14	111° 33
DECEMBER.	1	114° 7	118° 2	116° 0	116° 0	116° 9	112° 4	109° 2	108° 6	108° 5	111° 0	111° 1
	2	118° 4	117° 5	109° 2	115° 8	114° 2	109° 5	108° 1	107° 0	109° 0	111° 2	112° 0
	3	115° 5	115° 6	113° 6	116° 8	115° 9	113° 8	111° 5	110° 0	110° 8	110° 2	111° 2
	4	116° 0	112° 0	114° 2	116° 4	112° 1	105° 1	104° 0	105° 2	104° 4	106° 2	111° 2
	5	118° 5	119° 3	117° 2	118° 3	115° 0	112° 2	106° 3	106° 0	105° 4	106° 6	111° 3
	6	—	—	—	—	—	—	—	—	—	—	—
	7	117° 0	116° 2	118° 0	118° 0	116° 2	114° 6	111° 2	108° 8	107° 6	108° 0	110° 0
	8	115° 0	117° 4	118° 7	119° 0	118° 6	115° 8	112° 5	109° 4	108° 4	109° 8	110° 7
	9	115° 4	116° 3	118° 6	120° 7	120° 5	116° 0	112° 0	108° 5	107° 9	108° 0	106° 2
	10	113° 2	111° 8	116° 0	119° 0	117° 8	116° 1	112° 2	111° 0	109° 4	108° 0	109° 2
	11	113° 4	108° 9	118° 8	115° 3	117° 2	115° 2	111° 2	109° 8	109° 2	109° 2	109° 7
	12	116° 7	117° 0	119° 2	118° 6	117° 1	117° 2	113° 6	110° 8	110° 1	109° 0	109° 2
	13	—	—	—	—	—	—	—	—	—	—	—
	14	114° 0	115° 2	115° 4	115° 8	115° 8	115° 0	112° 9	112° 0	109° 9	109° 9	110° 3
	15	113° 3	116° 6	118° 1	118° 5	117° 3	114° 3	112° 7	111° 8	111° 1	110° 6	111° 9
	16	115° 9	115° 9	116° 4	118° 3	119° 0	117° 0	113° 1	110° 8	109° 0	110° 0	111° 4
	17	115° 0	115° 4	116° 3	117° 0	117° 0	115° 4	111° 1	110° 0	110° 0	111° 0	110° 8
	18	117° 6	117° 8	117° 0	120° 0	117° 5	113° 8	111° 4	108° 1	109° 6	109° 9	110° 0
	19	115° 5	115° 8	117° 4	118° 5	117° 1	114° 8	111° 1	109° 0	108° 6	109° 4	111° 5
	20	—	—	—	—	—	—	—	—	—	—	—
	21	113° 9	113° 1	114° 3	118° 7	117° 4	113° 0	111° 0	109° 9	110° 0	111° 0	111° 8
	22	115° 0	116° 2	116° 0	120° 0	117° 0	113° 8	110° 0	109° 7	110° 0	110° 2	111° 0
	23	114° 0	116° 8	117° 5	120° 0	114° 8	109° 0	107° 4	110° 0	105° 4	107° 0	107° 0
	24	111° 2	116° 5	118° 1	117° 4	120° 0	115° 0	112° 0	110° 0	109° 2	110° 4	112° 1
	25 ^a	—	—	—	—	—	—	—	—	—	—	—
	26	114° 2	115° 4	114° 2	115° 2	112° 6	110° 7	110° 0	109° 0	109° 2	110° 0	111° 2
	27	—	—	—	—	—	—	—	—	—	—	—
	28	112° 8	113° 3	114° 8	115° 0	116° 2	115° 2	113° 2	112° 4	110° 6	112° 0	111° 3
	29	113° 0	114° 2	115° 0	116° 8	117° 0	113° 8	111° 2	109° 2	109° 2	110° 8	112° 7
	30	113° 4	116° 0	115° 0	117° 4	115° 2	111° 2	108° 8	108° 0	110° 0	111° 2	112° 0
	31	114° 0	114° 8	116° 2	116° 5	114° 0	111° 9	110° 8	110° 6	111° 7	112° 0	113° 8
Hourly Means	114° 87	115° 51	116° 20	117° 05	116° 52	113° 53	110° 71	109° 42	108° 97	109° 67	110° 70	112° 37

^a Christmas Day.

DECLINATION.

Angular Value of one Scale Division of the Declinometer = $0^{\circ}.731$. Increasing Numbers denote decreasing Westerly Declination.

		DECLINATION.														
		Angular Value of one Scale Division of the Declinometer = 0°.721. Increasing Numbers denote decreasing Westerly Declination.														
0h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.		
Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
02	107.1	112.0	114.0	116.6	112.8	113.5	113.0	116.0	111.0	112.0	112.4	106.2	113.2	109.90	113.41	
06	109.9	112.1	111.7	113.2	113.6	113.4	111.0	113.0	113.4	114.2	114.0	114.2	114.4	112.19	113.31	
10	111.2	110.2	112.0	115.5	117.2	116.8	117.0	115.0	114.2	110.0	117.9	115.1	116.1	113.31	112.72	
14	111.5	112.5	113.9	113.8	114.1	113.5	113.7	118.8	109.0	112.2	115.2	114.2	113.0	112.72	114.12	
18	110.8	112.6	112.0	120.6	117.9	113.0	116.8	115.8	115.0	115.2	118.0	116.1	116.0	114.12	113.41	
22	109.2	110.0	119.7	117.0	115.0	113.0	113.0	—	—	—	—	—	—	—	112.11	
26	—	111.3	112.0	112.8	112.6	115.0	113.2	113.8	112.2	112.5	113.0	113.8	113.1	112.11	112.83	
30	110.2	110.2	116.0	112.9	112.5	113.2	113.5	113.4	113.1	112.4	113.1	113.1	113.7	112.83	112.15	
34	109.2	111.8	111.4	112.3	112.4	113.2	113.1	112.8	112.1	112.0	113.8	114.0	114.0	112.15	112.52	
38	110.6	111.5	112.1	113.1	113.0	112.8	113.3	112.0	112.2	113.0	113.6	114.0	114.4	113.52	112.27	
42	108.0	108.4	112.1	111.7	111.3	115.8	115.1	115.6	114.0	115.0	113.2	115.2	97.4	112.27	112.43	
46	110.8	111.3	112.0	112.2	112.8	112.0	112.7	—	—	—	—	—	—	—	112.75	
50	—	—	—	—	—	—	—	113.2	112.4	112.0	112.1	110.5	113.9	—	112.75	
54	109.4	112.8	112.0	112.8	113.0	113.0	112.8	115.0	113.0	113.2	113.7	114.5	115.0	112.75	110.39	
58	108.2	112.8	113.0	111.8	116.1	116.3	115.8	122.0	122.0	111.9	116.0	124.9	103.4	110.39	112.00	
02	109.2	110.5	111.9	114.6	112.2	113.0	113.0	111.0	113.0	113.0	113.0	113.5	114.3	112.00	112.27	
06	112.0	110.9	111.0	114.2	115.5	114.2	113.9	112.6	112.2	112.0	114.0	115.2	113.8	112.27	113.01	
10	127.0	105.0	116.5	110.0	113.8	114.2	113.0	114.4	109.2	109.5	114.0	115.2	115.4	113.01	113.75	
14	111.7	111.8	113.4	113.8	127.2	113.4	113.2	—	—	—	—	—	—	—	113.43	
18	—	—	—	—	—	—	—	112.2	109.4	113.1	112.8	114.4	116.2	—	113.02	
22	111.4	112.0	113.4	114.0	113.9	114.0	113.4	113.0	113.0	112.4	113.5	113.7	115.0	113.43	113.93	
26	111.9	113.2	113.8	114.1	113.4	113.7	113.9	112.9	112.9	113.0	113.2	114.0	114.4	113.02	114.27	
30	113.1	113.0	114.2	114.0	114.9	115.1	114.5	114.6	114.0	113.6	113.0	113.4	118.8	113.93	113.27	
34	107.3	107.3	113.1	113.1	115.9	117.1	111.1	119.0	123.0	123.0	117.6	116.0	95.4	123.6	118.1	
38	109.2	110.0	109.2	140.0	118.2	117.2	120.0	116.5	116.2	110.1	109.2	110.5	107.8	106.1	112.87	
42	118.0	118.0	118.0	132.2	114.4	127.2	113.5	112.8	—	—	—	—	—	—	113.95	
46	—	—	—	—	—	—	—	110.8	106.2	114.2	114.4	115.0	113.3	—	113.95	
50	113.6	114.2	114.1	120.1	114.3	115.0	114.8	113.8	105.0	112.9	115.3	114.1	114.0	112.55	112.55	
54	111.33	111.41	115.26	114.19	115.32	114.54	114.24	114.31	112.31	111.90	113.76	114.38	113.17	112.76	112.76	
58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
02	111.2	110.0	113.7	114.2	117.0	117.8	112.3	117.0	115.6	115.0	112.3	115.0	105.8	113.37	113.37	
06	113.3	114.7	114.0	114.0	113.8	114.0	115.7	113.0	113.0	115.2	112.2	113.4	114.9	113.05	113.05	
10	110.7	112.3	113.2	114.2	114.2	113.4	114.6	116.4	121.9	113.1	116.4	115.2	115.0	113.84	113.84	
14	116.2	117.0	118.4	119.0	119.8	126.4	118.2	116.7	116.0	116.0	114.2	117.0	118.0	114.16	114.16	
18	112.9	114.1	115.1	115.9	116.0	115.4	115.4	—	—	—	—	—	—	—	113.54	
22	—	—	—	—	—	—	—	115.0	112.0	114.2	113.8	114.8	114.2	—	113.54	
26	112.0	113.0	114.3	114.2	114.0	114.3	114.0	113.8	113.2	114.0	113.2	113.8	114.0	113.47	113.47	
30	112.3	112.7	113.5	113.0	116.0	115.2	115.8	115.0	114.8	113.4	114.0	114.6	115.0	114.19	114.19	
34	108.2	101.6	103.0	125.0	120.2	128.0	123.4	120.8	109.7	113.0	113.7	112.3	113.9	114.29	114.29	
38	115.5	115.4	115.0	115.8	119.3	116.2	118.8	117.2	117.0	112.9	113.1	114.5	110.6	114.37	114.37	
42	110.9	112.4	112.7	117.0	119.2	118.2	117.7	116.0	115.2	121.8	123.0	118.8	118.0	114.95	114.95	
46	113.0	114.2	113.6	115.1	115.2	130.8	116.0	—	—	—	—	—	—	—	115.25	
50	—	—	—	—	—	—	—	114.0	114.4	115.2	115.8	116.0	114.2	—	115.25	
54	113.7	111.7	112.2	113.2	115.3	115.8	116.0	114.8	112.8	117.2	116.4	121.8	114.0	114.21	114.21	
58	111.2	112.6	112.0	116.2	115.0	115.1	115.0	114.2	115.1	113.9	115.6	115.7	116.0	114.32	114.32	
02	113.8	113.6	113.8	114.8	114.3	114.1	114.5	114.1	114.2	114.6	114.7	115.0	115.0	114.30	114.30	
06	111.9	113.2	112.9	120.6	114.0	114.9	114.7	114.0	114.8	115.2	115.2	118.1	117.8	114.43	114.43	
10	111.5	111.7	115.8	114.7	114.7	116.0	115.5	115.8	115.0	115.0	115.4	115.2	115.0	114.33	114.33	
14	111.2	112.0	112.2	114.0	114.4	113.0	114.0	—	—	—	—	—	—	—	113.42	
18	—	—	—	—	—	—	—	117.4	113.0	113.0	113.0	113.2	113.1	—	113.42	
22	114.7	114.0	112.2	113.8	115.0	116.4	113.0	114.2	113.6	113.7	114.8	115.5	115.7	113.78	113.78	
26	111.6	111.4	113.5	115.0	114.4	115.4	115.6	115.1	114.5	114.7	115.0	117.8	117.0	114.16	114.16	
30	107.5	110.1	114.0	123.9	123.8	122.7	118.2	114.0	113.2	116.7	115.0	111.0	109.2	114.51	114.51	
34	114.0	115.0	116.0	116.2	117.0	119.6	116.2	—	—	—	—	—	—	—	114.22	
38	—	—	—	—	—	—	—	114.1	111.2	112.0	114.0	112.9	111.2	—	114.22	
42	113.0	114.0	115.0	119.8	115.9	118.1	115.0	—	—	—	—	—	—	—	113.55	
46	—	—	—	—	—	—	—	113.0	114.0	113.2	115.4	115.0	112.0	—	113.55	
50	—	112.9	115.0	115.4	114.8	114.7	113.0	114.0	112.2	112.9	113.7	113.0	112.8	113.47	113.47	
54	112.0	113.0	114.7	114.5	114.2	114.0	113.7	112.3	112.0	112.8	113.2	114.0	114.2	113.29	113.29	
58	113.8	114.0	114.0	114.0	114.0	113.7	113.4	112.2	112.5	113.5	113.4	114.2	114.1	112.92	112.92	
02	113.8	114.0	114.2	114.6	115.0	114.2	113.8	113.2	113.1	112.9	113.9	114.3	114.2	113.58	113.58	
06	112.37	112.71	114.46	116.08	116.02	117.21	115.52	114.77	114.60	114.43	114.63	115.08	114.03	113.96	113.96	

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0°.721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JANUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	114°8	115°8	116°0	116°7	115°6	112°2	109°8	109°2	110°0	110°4	113°2	114°2
2	114°0	116°2	119°2	116°2	114°5	111°8	108°6	108°4	110°0	109°2	111°8	112°5
3	—	—	—	—	—	—	—	—	—	—	—	—
4	117°0	116°4	118°2	119°0	118°6	112°2	107°7	106°0	106°2	110°0	111°1	110°0
5	116°0	116°5	118°4	120°1	117°1	114°5	112°3	110°2	110°0	111°0	112°1	112°1
6	113°1	117°5	120°8	122°8	120°7	117°1	110°2	107°8	107°0	109°8	112°8	114°7
7	114°9	116°0	119°3	120°1	117°0	113°0	109°6	108°0	108°0	110°6	113°0	115°0
8	115°0	115°9	117°5	121°2	116°4	111°3	109°2	109°2	108°8	110°8	112°6	113°5
9	115°4	115°4	117°7	119°0	117°1	113°2	109°8	108°5	107°2	105°9	108°0	112°2
10	—	—	—	—	—	—	—	—	—	—	—	—
11	115°4	114°2	120°0	121°0	112°1	108°5	106°8	106°9	106°4	110°0	112°6	112°0
12	115°7	117°7	109°1	120°2	119°1	114°3	111°2	107°8	107°1	108°0	110°8	112°0
13	112°0	112°2	119°2	116°8	116°8	115°0	110°7	107°0	108°2	110°0	111°0	112°2
14	115°0	114°0	116°9	117°2	115°7	111°4	109°0	109°2	108°8	111°8	112°8	116°5
15	113°8	114°0	115°4	116°2	113°7	112°0	109°2	108°0	108°4	110°5	111°4	112°3
16	112°0	116°0	117°2	117°8	115°4	114°1	111°2	108°4	110°1	111°1	112°1	112°1
17	—	—	—	—	—	—	—	—	—	—	—	—
18	114°9	115°0	116°5	116°0	115°0	112°9	110°7	109°1	111°1	111°9	111°9	112°2
19	115°8	115°7	117°0	117°0	114°0	111°9	109°2	109°7	113°0	115°0	115°0	115°2
20	116°0	113°0	118°2	120°0	111°2	111°2	108°7	110°0	113°4	115°0	113°7	113°0
21	117°0	118°8	118°1	115°6	113°8	110°0	107°0	109°0	112°0	113°0	116°6	115°3
22	119°2	119°5	116°0	115°0	114°7	112°1	110°8	109°0	112°1	112°6	113°0	113°3
23	117°0	117°9	118°9	118°0	117°0	115°1	112°0	111°1	112°1	113°2	113°2	114°0
24	—	—	—	—	—	—	—	—	—	—	—	—
25	116°0	116°4	118°0	120°0	117°1	116°0	109°8	109°0	109°2	112°0	113°0	114°0
26	114°8	115°3	118°0	117°0	118°8	116°4	115°0	112°2	111°2	112°0	112°8	112°6
27	117°3	116°8	116°3	115°0	114°1	114°4	112°6	111°8	110°8	111°8	112°3	113°1
28	115°0	115°8	117°2	117°4	117°5	116°2	115°5	114°0	113°8	113°5	112°0	112°8
29	120°4	111°1	112°7	111°5	111°7	109°9	111°5	108°6	107°2	105°8	105°8	105°0
30	114°4	115°0	117°0	115°3	113°8	115°5	117°0	111°3	108°0	102°2	114°2	107°2
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	115°46	115°70	117°26	117°77	115°71	113°16	110°58	109°21	109°66	110°66	112°26	112°65
FEBRUARY.	1	113°0	112°9	115°7	110°0	105°2	107°8	108°2	109°3	112°2	112°6	112°3
	2	113°8	117°0	116°2	113°0	110°2	106°8	105°2	105°5	108°2	110°2	112°2
	3	115°2	119°4	119°0	117°0	111°7	106°1	103°9	104°8	107°5	102°9	110°6
	4	116°0	116°6	118°0	114°7	112°6	108°8	106°9	108°0	108°3	112°0	112°9
	5	113°8	114°4	116°6	115°1	112°6	110°2	108°0	108°0	109°3	111°6	112°3
	6	119°3	114°7	123°5	111°0	110°4	93°6	104°2	103°8	103°6	106°4	105°1
	7	—	—	—	—	—	—	—	—	—	—	—
	8	112°8	114°4	115°0	112°0	115°0	114°0	108°8	107°2	107°7	110°1	108°0
	9	115°0	115°8	117°0	115°0	113°1	111°1	108°0	108°4	106°1	105°9	105°9
	10	113°8	114°6	116°8	115°0	115°0	112°3	111°0	108°2	109°4	108°2	109°0
	11	116°0	115°4	116°7	115°0	112°0	110°0	109°0	108°2	108°4	108°2	109°7
	12	113°0	115°0	115°2	117°2	115°5	111°0	111°0	108°9	107°4	108°8	107°4
	13	113°0	113°4	113°0	112°0	111°1	109°8	109°8	109°9	110°0	110°1	111°0
	14	—	—	—	—	—	—	—	—	—	—	—
	15	114°0	114°8	112°5	111°0	109°2	107°6	107°1	107°9	109°5	109°5	110°8
	16	118°6	115°6	109°5	109°1	108°1	108°2	106°1	107°0	108°9	110°2	112°0
	17	114°3	115°0	116°3	113°5	112°0	107°2	104°7	105°2	108°0	111°0	110°3
	18	118°0	119°1	122°0	120°0	117°2	111°0	107°0	107°0	107°4	107°8	109°7
	19	110°2	117°0	118°7	117°2	115°9	111°4	109°0	106°0	106°0	107°6	109°5
	20	113°5	115°8	113°0	115°0	112°1	108°7	106°6	104°2	104°0	106°4	106°9
	21	—	—	—	—	—	—	—	—	—	—	—
	22	116°8	114°1	106°3	100°5	103°0	110°2	107°9	104°7	105°3	106°0	103°1
	23	115°2	115°2	111°1	114°0	114°0	112°0	107°2	106°6	108°0	108°2	108°0
	24	109°7	117°1	114°0	108°0	110°4	112°2	108°2	108°2	102°2	106°0	104°2
	25	113°0	110°0	116°0	115°0	110°2	104°2	103°0	108°3	106°1	105°1	107°6
	26	115°0	114°0	117°4	116°7	111°0	111°2	107°7	106°7	110°2	108°0	110°0
	27	112°9	113°1	116°0	116°0	115°4	108°4	102°8	102°5	101°1	106°7	110°2
	28	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	114°41	115°18	115°78	113°46	111°79	108°91	107°14	106°85	107°41	108°40	109°15	110°42

* Twenty minutes late.

* Twelve minutes late.

* Ten minutes late.

DECLINATION.														
Angular Value of one Scale Division of the Delinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.														
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
113° 2	114° 2	115° 0	115° 2	118° 8	114° 9	115° 1	115° 3	115° 0	114° 7	114° 9	114° 9	123° 0	119° 9	114° 78
11° 8	112° 5	114° 7	114° 6	115° 1	115° 0	115° 0	114° 9	118° 0	112° 3	114° 8	108° 2	112° 0	115° 0	113° 42
11° 1	110° 0	111° 1	114° 1	120° 0	120° 0	117° 0	116° 0	114° 0	98° 2	120° 2	115° 2	113° 0	115° 0	113° 59
12° 1	112° 1	112° 9	113° 2	122° 2	119° 4	118° 0	116° 6	112° 0	115° 4	118° 0	114° 8	114° 2	115° 0	115° 08
12° 8	114° 7	115° 0	115° 6	119° 0	117° 4	116° 2	115° 2	114° 2	114° 0	113° 5	113° 2	113° 4	114° 0	114° 79
13° 0	115° 0	115° 0	115° 6	117° 9	116° 1	115° 1	114° 3	114° 3	113° 3	113° 0	112° 8	115° 0	115° 0	114° 29
12° 6	113° 5	114° 4	115° 5	116° 0	115° 9	116° 0	116° 5	116° 0	114° 0	114° 8	115° 5	116° 0	115° 4	114° 47
108° 0	112° 2	113° 0	112° 2	117° 4	116° 5	116° 7	115° 7	114° 8	115° 0	114° 7	114° 8	114° 2	117° 2	113° 80
12° 6	112° 0	114° 0	114° 3	116° 3	116° 3	116° 0	116° 4	115° 2	115° 4	116° 2	114° 0	116° 5	113° 76	
10° 8	112° 0	112° 0	114° 8	116° 2	119° 2	113° 2	115° 0	116° 5	115° 0	114° 9	114° 5	113° 8	108° 4	113° 56
11° 0	112° 2	111° 4	114° 2	115° 0	115° 0	114° 9	114° 7	114° 2	115° 0	111° 0	114° 9	114° 8	115° 3	113° 40
12° 8	116° 5	113° 4	112° 2	113° 5	116° 3	117° 2	118° 0	109° 2	114° 7	113° 2	113° 0	113° 0	113° 5	113° 56
11° 4	112° 3	113° 0	110° 2	113° 3	113° 3	113° 3	113° 0	113° 0	113° 2	113° 2	113° 0	113° 0	110° 4	112° 37
12° 1	112° 1	112° 0	113° 8	114° 0	114° 3	113° 2	113° 4	113° 6	112° 2	113° 4	112° 8	116° 4	115° 5	113° 42
11° 9	112° 2	112° 0	113° 4	115° 0	114° 8	114° 2	113° 6	114° 0	114° 1	114° 0	115° 0	115° 0	114° 8	113° 63
15° 0	115° 2	115° 2	115° 2	115° 4	115° 4	115° 1	115° 5	114° 3	114° 3	115° 0	118° 2	121° 2	118° 2	115° 06
13° 7	113° 0	117° 1	116° 0	126° 3	114° 1	114° 0	115° 6	106° 8	115° 1	118° 0	118° 4	117° 6	110° 8	114° 72
16° 6	115° 3	114° 2	116° 2	115° 1	115° 8	115° 2	115° 0	115° 2	115° 4	115° 3	115° 8	117° 0	114° 7	114° 63
13° 0	113° 3	114° 0	115° 8	115° 0	116° 2	116° 3	115° 0	114° 0	115° 4	116° 7	117° 0	115° 8	115° 8	114° 76
13° 2	114° 0	114° 2	115° 4	113° 4	119° 2	113° 8	113° 0	112° 4	114° 0	115° 8	116° 4	116° 2	116° 0	114° 97
13° 0	114° 0	114° 2	115° 8	114° 6	115° 0	114° 8	114° 8	115° 0	114° 2	114° 4	115° 0	115° 5	115° 2	114° 54
12° 8	112° 6	113° 1	111° 2	112° 2	115° 0	114° 2	114° 1	114° 5	110° 5	115° 5	116° 3	116° 2	117° 0	114° 41
12° 3	113° 1	114° 1	114° 3	114° 2	113° 9	114° 0	114° 0	114° 2	114° 0	114° 7	115° 2	115° 0	115° 0	114° 12
12° 0	112° 8	113° 0	111° 0	109° 8	111° 0	112° 8	113° 8	114° 4	112° 8	114° 6	132° 0	125° 8	116° 8	113° 35
15° 8	105° 0	101° 2	112° 0	112° 2	114° 0	116° 2	114° 5	115° 6	114° 0	115° 1	116° 6	114° 7	115° 0	111° 76
14° 2	107° 2	111° 2	111° 4	124° 4	110° 2	116° 2	116° 1	114° 4	114° 4	115° 0	112° 0	113° 0	118° 0	113° 63
2° 26	112° 65	113° 09	113° 97	116° 24	115° 55	115° 14	115° 00	113° 94	113° 48	114° 97	115° 44	115° 72	115° 13	114° 07
2° 3	111° 3	110° 9	111° 1	110° 5	111° 2	111° 0	111° 0	112° 0	110° 5	111° 6	112° 3	113° 8	115° 2	111° 33
2° 2	111° 7	111° 5	111° 6	111° 9	112° 0	111° 1	111° 0	110° 8	111° 2	110° 6	112° 0	110° 2	112° 0	111° 08
0° 6	111° 2	111° 8	112° 0	112° 7	112° 2	112° 4	111° 8	111° 5	112° 5	115° 0	113° 4	112° 5	111° 4	111° 60
2° 9	112° 4	112° 0	113° 0	112° 2	112° 0	112° 4	112° 0	112° 0	111° 5	111° 9	112° 4	112° 0	113° 0	112° 23
5° 1	109° 1	120° 0	111° 1	110° 4	127° 1	121° 2	118° 0	111° 1	113° 2	110° 2	111° 0	112° 0	112° 3	111° 89
8° 0	111° 0	110° 0	111° 8	120° 0	114° 9	113° 0	120° 3	116° 8	113° 0	113° 2	114° 0	114° 8	117° 0	113° 12
5° 9	107° 7	114° 8	113° 2	112° 0	114° 3	112° 0	111° 4	112° 6	112° 0	111° 8	112° 4	115° 0	115° 5	111° 92
9° 0	109° 2	110° 3	111° 0	111° 4	113° 6	111° 0	114° 0	112° 8	111° 4	112° 1	113° 0	114° 0	114° 2	112° 11
9° 7	110° 2	111° 2	113° 0	114° 2	112° 3	111° 7	111° 6	111° 8	112° 0	112° 0	113° 2	114° 0	114° 8	112° 11
7° 4	107° 1	108° 1	110° 9	111° 2	112° 0	113° 2	112° 2	111° 6	112° 0	112° 0	112° 3	112° 2	113° 0	111° 59
1° 0	110° 0	110° 7	111° 0	111° 9	111° 9	112° 0	112° 2	110° 2	113° 2	111° 0	114° 6	114° 7	112° 6	111° 75
0° 8	111° 0	111° 2	110° 0	110° 0	119° 0	110° 4	110° 2	110° 0	113° 5	114° 0	114° 6	104° 2	120° 0	111° 33
2° 0	115° 0	113° 2	112° 4	111° 0	111° 4	111° 5	111° 0	107° 8	108° 6	111° 0	111° 7	111° 1	114° 0	111° 09
0° 3	110° 0	114° 0	111° 8	112° 0	112° 5	112° 6	112° 1	111° 8	112° 6	114° 0	114° 0	114° 7	116° 5	111° 92
0° 7	110° 8	110° 8	112° 1	112° 4	113° 0	113° 2	112° 3	116° 0	113° 5	111° 5	111° 0	109° 3	115° 2	112° 89
0° 5	110° 0	110° 4	111° 0	111° 2	111° 9	111° 8	111° 3	111° 3	111° 8	113° 8	111° 7	113° 7	113° 0	111° 73
5° 9	107° 9	110° 0	112° 0	112° 3	112° 3	111° 4	112° 2	112° 4	111° 5	104° 2	123° 8	121° 2	127° 6	111° 87
1° 1	106° 2	100° 0	103° 7	107° 0	98° 8	122° 4	119° 2	90° 4	124° 8	121° 0	118° 0	115° 2	116° 3	109° 20
0° 0	108° 8	110° 0	111° 2	110° 0	110° 2	110° 4	110° 9	111° 6	112° 1	112° 2	113° 0	115° 0	113° 2	111° 34
1° 2	111° 2	120° 8	119° 2	110° 6	124° 0	125° 2	122° 0	108° 4	118° 3	105° 6	120° 2	115° 0	112° 0	113° 03
0° 0	116° 0	112° 0	112° 0	116° 8	113° 2	118° 6	125° 5	121° 3	120° 8	115° 0	110° 2	107° 0	113° 4	112° 26
0° 2	110° 2	117° 0	110° 8	112° 2	113° 5	114° 0	110° 2	110° 2	109° 8	107° 0	112° 0	112° 4	113° 0	111° 92
11° 0	—	—	113° 0	121° 0	113° 0	112° 7	111° 2	111° 2	111° 3	111° 2	112° 2	112° 6	113° 0	111° 32
11° 15	110° 42	111° 82	111° 71	112° 39	113° 30	113° 81	113° 66	111° 19	112° 98	111° 92	113° 64	113° 07	115° 18	111° 82

* Five minutes late.

* Two minutes late.

* Three minutes late.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	1	116° 8'	120° 7'	124° 9'	121° 0'	110° 7'	107° 5'	102° 5'	95° 9'	95° 7'	96° 7'	97° 1'
	2	113° 0'	114° 5'	117° 9'	118° 5'	116° 2'	111° 0'	106° 7'	104° 5'	104° 9'	108° 6'	109° 5'
	3	112° 9'	114° 9'	117° 4'	117° 3'	116° 2'	113° 7'	108° 9'	105° 8'	104° 8'	105° 9'	108° 3'
	4	113° 7'	115° 3'	116° 7'	117° 3'	115° 2'	107° 8'	104° 9'	101° 1'	102° 7'	99° 7'	100° 9'
	5	112° 2'	116° 1'	116° 8'	118° 0'	114° 7'	111° 0'	106° 7'	103° 7'	104° 7'	105° 0'	106° 5'
	6	114° 1'	116° 9'	114° 4'	120° 8'	117° 7'	113° 4'	108° 9'	105° 1'	103° 1'	103° 3'	105° 4'
	7	—	—	—	—	—	—	—	—	—	—	—
	8	108° 7'	112° 8'	117° 0'	115° 8'	112° 0'	109° 5'	104° 5'	102° 0'	102° 2'	99° 4'	102° 4'
	9	114° 8'	109° 0'	101° 5'	115° 0'	117° 2'	113° 8'	109° 2'	107° 6'	105° 2'	106° 7'	107° 6'
	10	110° 0'	110° 0'	117° 2'	117° 0'	114° 0'	106° 7'	104° 5'	101° 0'	108° 8'	102° 0'	102° 7'
	11	116° 5'	117° 7'	116° 9'	116° 9'	114° 0'	108° 0'	105° 0'	102° 8'	103° 1'	103° 8'	103° 8'
	12	113° 6'	115° 0'	117° 3'	117° 8'	117° 0'	112° 8'	107° 3'	103° 8'	103° 0'	102° 8'	104° 0'
	13	118° 0'	119° 2'	120° 0'	118° 7'	116° 0'	111° 8'	107° 0'	103° 6'	103° 2'	103° 0'	103° 0'
	14	—	—	—	—	—	—	—	—	—	—	—
	15	115° 2'	118° 0'	121° 8'	118° 8'	117° 1'	109° 2'	103° 2'	102° 2'	101° 5'	104° 0'	106° 9'
	16	114° 4'	116° 5'	116° 2'	115° 9'	111° 9'	103° 8'	101° 9'	101° 0'	101° 9'	105° 0'	107° 8'
	17	113° 5'	117° 5'	119° 1'	121° 0'	118° 7'	112° 6'	105° 0'	100° 3'	100° 0'	101° 7'	105° 0'
	18	111° 2'	116° 0'	120° 0'	120° 7'	117° 8'	107° 9'	99° 8'	97° 2'	99° 8'	100° 8'	105° 2'
	19 ^d	119° 0'	64° 0'	74° 2'	102° 8'	107° 7'	102° 0'	106° 3'	104° 6'	103° 8'	124° 1'	116° 8'
	20	109° 2'	115° 2'	122° 0'	117° 2'	114° 0'	111° 2'	107° 8'	105° 9'	105° 1'	105° 4'	107° 8'
	21	—	—	—	—	—	—	—	—	—	—	—
	22	114° 8'	116° 4'	119° 0'	118° 2'	115° 2'	112° 8'	108° 1'	104° 0'	103° 0'	102° 5'	103° 3'
	23	114° 0'	115° 0'	113° 8'	114° 2'	111° 2'	106° 0'	102° 9'	99° 5'	100° 1'	101° 1'	104° 0'
	24	111° 0'	110° 0'	108° 0'	111° 2'	109° 7'	109° 2'	104° 8'	102° 7'	103° 0'	108° 4'	104° 2'
	25	110° 4'	111° 2'	113° 0'	115° 1'	113° 9'	109° 2'	105° 4'	101° 9'	101° 0'	102° 4'	104° 0'
	26	114° 0'	112° 2'	114° 2'	115° 4'	113° 1'	108° 8'	105° 0'	102° 7'	101° 9'	104° 0'	103° 1'
	27	110° 2'	112° 8'	113° 8'	115° 2'	111° 5'	105° 9'	102° 6'	103° 0'	105° 3'	106° 2'	106° 8'
	28	—	—	—	—	—	—	—	—	—	—	—
	29	112° 4'	115° 1'	117° 2'	117° 2'	112° 8'	106° 4'	101° 3'	100° 3'	101° 4'	103° 0'	105° 0'
	30	118° 6'	117° 8'	122° 0'	117° 7'	115° 0'	107° 6'	103° 2'	100° 0'	101° 4'	104° 0'	107° 2'
	31	115° 0'	118° 8'	119° 9'	118° 6'	114° 8'	107° 6'	101° 4'	100° 2'	101° 8'	105° 4'	108° 9'
Hourly Means		113° 39'	115° 18'	116° 85'	117° 33'	114° 52'	109° 51'	104° 94'	102° 25'	102° 62'	103° 28'	104° 89'
APRIL.	1	116° 0'	116° 4'	113° 0'	118° 6'	116° 4'	109° 8'	105° 0'	102° 8'	103° 2'	104° 0'	107° 5'
	2 ⁱ	—	—	—	—	—	—	—	—	—	—	—
	3	107° 6'	115° 2'	115° 7'	110° 0'	104° 0'	107° 9'	96° 9'	94° 6'	96° 0'	94° 8'	97° 8'
	4	—	—	—	—	—	—	—	—	—	—	—
	5	115° 0'	119° 0'	119° 8'	118° 8'	116° 0'	109° 4'	103° 0'	100° 8'	100° 9'	105° 0'	108° 8'
	6	116° 2'	118° 0'	121° 4'	120° 0'	114° 8'	105° 4'	102° 0'	100° 2'	101° 6'	104° 0'	105° 7'
	7 ⁱ	111° 2'	120° 0'	121° 8'	119° 9'	116° 1'	108° 1'	101° 6'	100° 6'	95° 0'	101° 1'	98° 3'
	8	126° 6'	122° 2'	121° 4'	119° 4'	112° 8'	108° 2'	105° 6'	103° 4'	103° 4'	107° 6'	109° 4'
	9	118° 2'	121° 0'	120° 0'	117° 5'	113° 4'	106° 2'	103° 4'	103° 0'	107° 2'	109° 0'	109° 4'
	10	114° 8'	117° 1'	116° 4'	115° 4'	110° 6'	105° 0'	102° 6'	103° 2'	103° 2'	105° 4'	109° 6'
	11	—	—	—	—	—	—	—	—	—	—	—
	12	115° 8'	118° 0'	117° 2'	118° 2'	111° 8'	107° 8'	102° 6'	101° 4'	99° 8'	101° 5'	97° 6'
	13	116° 0'	117° 0'	115° 0'	114° 4'	110° 0'	101° 2'	105° 6'	100° 4'	101° 4'	103° 7'	108° 0'
	14	117° 0'	118° 4'	117° 4'	115° 2'	110° 7'	103° 2'	98° 4'	97° 2'	97° 2'	99° 4'	101° 6'
	15	114° 4'	117° 0'	116° 3'	116° 2'	109° 1'	101° 0'	96° 6'	97° 4'	99° 4'	102° 2'	105° 4'
	16	121° 6'	123° 6'	121° 4'	116° 0'	110° 4'	101° 0'	101° 4'	95° 8'	97° 4'	99° 2'	105° 9'
	17	109° 6'	109° 7'	116° 6'	121° 4'	117° 1'	108° 6'	102° 2'	99° 5'	100° 4'	103° 6'	106° 5'
	18	—	—	—	—	—	—	—	—	—	—	—
	19 ^b	115° 4'	118° 2'	119° 4'	118° 4'	113° 6'	109° 5'	105° 0'	101° 4'	101° 4'	102° 7'	104° 7'
	20 ^b	105° 9'	92° 1'	89° 1'	94° 6'	95° 8'	95° 8'	94° 8'	101° 3'	90° 2'	93° 0'	88° 0'
	21 ^b	111° 0'	72° 6'	75° 9'	91° 4'	92° 6'	99° 2'	101° 0'	102° 6'	103° 2'	100° 0'	101° 6'
	22	112° 7'	113° 2'	113° 9'	110° 5'	110° 2'	107° 0'	103° 7'	100° 6'	106° 5'	102° 4'	101° 4'
	23	112° 8'	112° 8'	112° 0'	112° 2'	110° 2'	105° 4'	102° 8'	103° 0'	102° 5'	103° 6'	101° 6'
	24	113° 4'	113° 2'	113° 4'	111° 2'	108° 3'	104° 3'	101° 4'	101° 6'	103° 4'	105° 6'	107° 6'
	25	—	—	—	—	—	—	—	—	—	—	—
	26	119° 3'	119° 5'	116° 3'	113° 9'	110° 8'	107° 1'	104° 6'	102° 7'	105° 4'	108° 9'	109° 5'
	27	117° 9'	120° 4'	119° 6'	117° 5'	107° 4'	106° 4'	103° 9'	102° 4'	102° 0'	103° 0'	107° 4'
	28	118° 2'	118° 0'	115° 0'	110° 6'	110° 4'	103° 5'	99° 2'	103° 0'	103° 4'	105° 7'	107° 4'
	29	120° 0'	123° 4'	123° 0'	117° 8'	113° 6'	101° 4'	101° 9'	101° 0'	103° 8'	106° 8'	115° 0'
	30	111° 6'	112° 7'	118° 6'	113° 4'	115° 5'	106° 5'	101° 3'	101° 6'	99° 5'	104° 3'	107° 1'
Hourly Means		115° 94'	117° 42'	117° 30'	115° 63'	111° 60'	105° 82'	102° 24'	100° 89'	101° 91'	103° 80'	106° 49'

ⁱ Good Friday.^a S x minutes late.^b Four minutes late.^c Twelve minutes late.

Omitted in the Means, on account of the great influence of disturbance on those days.

^d Five minutes late.

		DECLINATION.												
		Angular Value of one Scale Division of the Declinometer = 0' 731. Increasing Numbers denote decreasing Westerly Declination.												
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
98° 7'	97° 1'	98° 9'	99° 1'	113° 2'	108° 1'	108° 5'	120° 8'	111° 8'	109° 7'	109° 9'	111° 8'	113° 7'	113° 4'	108° 51'
108° 6'	109° 5'	109° 7'	108° 8'	109° 8'	110° 5'	110° 5'	109° 8'	109° 6'	110° 7'	110° 5'	111° 9'	110° 2'	111° 0'	110° 65'
108° 3'	109° 3'	109° 4'	109° 7'	110° 7'	110° 9'	110° 9'	110° 7'	110° 6'	110° 9'	110° 9'	111° 0'	111° 9'	112° 5'	111° 07'
106° 9'	99° 7'	97° 4'	99° 9'	99° 5'	124° 5'	118° 0'	116° 1'	114° 1'	115° 3'	113° 9'	111° 9'	113° 2'	119° 8'	109° 52'
106° 5'	106° 7'	107° 0'	118° 9'	110° 9'	111° 7'	111° 9'	111° 5'	111° 7'	110° 8'	111° 8'	112° 7'	111° 7'	112° 1'	111° 03'
105° 4'	107° 8'	108° 2'	110° 5'	110° 0'	111° 8'	111° 4'	121° 1'	—	—	—	—	—	—	110° 67
—	—	—	—	—	—	—	—	118° 0'	115° 0'	109° 0'	118° 2'	120° 0'	117° 3'	112° 56'
102° 4'	104° 7'	110° 4'	113° 2'	113° 4'	122° 0'	115° 0'	118° 0'	112° 0'	118° 3'	115° 7'	113° 7'	87° 0'	115° 6'	110° 64'
107° 6'	108° 0'	111° 0'	111° 0'	113° 4'	117° 1'	111° 0'	112° 0'	109° 3'	110° 0'	110° 3'	110° 8'	111° 2'	113° 0'	110° 63'
102° 7'	106° 0'	108° 3'	108° 6'	109° 0'	110° 7'	112° 0'	110° 7'	110° 8'	112° 4'	106° 4'	114° 2'	115° 0'	114° 9'	109° 70'
103° 8'	106° 3'	110° 8'	111° 2'	109° 8'	110° 4'	110° 0'	111° 2'	111° 4'	111° 9'	112° 1'	112° 5'	113° 2'	113° 0'	110° 51'
104° 0'	104° 2'	106° 6'	107° 0'	113° 4'	110° 2'	112° 5'	112° 6'	115° 2'	117° 2'	115° 9'	116° 0'	117° 3'	115° 0'	111° 56'
103° 0'	101° 3'	105° 4'	104° 3'	107° 5'	111° 0'	110° 0'	111° 8'	—	—	—	—	—	—	110° 02'
—	—	—	—	—	—	—	—	111° 8'	110° 0'	111° 8'	113° 0'	104° 2'	115° 0'	110° 57
106° 9'	109° 0'	110° 2'	110° 3'	110° 8'	111° 0'	111° 8'	112° 0'	112° 6'	111° 5'	111° 2'	112° 0'	113° 3'	113° 2'	111° 07'
107° 8'	109° 8'	110° 0'	110° 0'	110° 2'	111° 0'	110° 8'	110° 8'	110° 8'	111° 0'	111° 4'	111° 8'	111° 8'	112° 4'	110° 00'
105° 0'	108° 4'	110° 2'	111° 2'	111° 8'	111° 2'	111° 0'	111° 0'	111° 0'	110° 2'	110° 0'	110° 6'	113° 9'	114° 0'	110° 79'
105° 2'	108° 0'	109° 2'	110° 6'	112° 4'	118° 5'	116° 9'	117° 9'	120° 6'	123° 4'	123° 9'	115° 5'	110° 0'	117° 5'	112° 53'
116° 8'	104° 4'	103° 5'	97° 0'	105° 0'	129° 4'	132° 3'	162° 0'	132° 7'	117° 0'	120° 0'	116° 0'	114° 1'	113° 0'	112° 45'
107° 8'	110° 0'	108° 0'	114° 4'	110° 0'	111° 0'	111° 1'	142° 2'	—	—	—	—	—	—	112° 22'
—	—	—	—	—	—	—	—	111° 8'	108° 5'	109° 8'	112° 0'	111° 6'	112° 0'	110° 01'
103° 3'	105° 0'	106° 2'	107° 4'	108° 1'	108° 2'	108° 8'	109° 0'	109° 2'	110° 8'	107° 0'	110° 8'	113° 0'	119° 4'	110° 69'
102° 1'	104° 0'	102° 2'	106° 2'	127° 0'	115° 6'	117° 0'	116° 5'	116° 0'	109° 3'	120° 9'	120° 0'	110° 0'	112° 8'	108° 07'
104° 2'	103° 0'	117° 0'	108° 0'	109° 3'	109° 0'	109° 2'	107° 5'	94° 4'	104° 2'	113° 8'	112° 2'	112° 6'	111° 2'	109° 33'
104° 0'	108° 7'	108° 0'	108° 3'	109° 0'	109° 2'	108° 9'	108° 5'	109° 7'	111° 4'	115° 3'	114° 2'	113° 3'	112° 0'	109° 31'
103° 1'	105° 0'	107° 0'	108° 1'	109° 2'	110° 0'	112° 0'	112° 3'	111° 8'	112° 8'	111° 2'	111° 4'	109° 0'	110° 2'	109° 47'
106° 8'	107° 7'	108° 0'	109° 2'	110° 0'	112° 8'	114° 2'	110° 8'	—	—	—	—	—	—	109° 90'
—	—	—	—	—	—	—	—	109° 5'	110° 2'	111° 0'	110° 4'	110° 0'	110° 1'	109° 90'
105° 0'	108° 0'	110° 0'	110° 2'	110° 8'	111° 0'	115° 2'	111° 0'	111° 0'	111° 7'	112° 3'	106° 1'	114° 1'	111° 1'	109° 90'
107° 2'	109° 8'	111° 8'	111° 0'	111° 2'	112° 2'	111° 1'	111° 4'	111° 8'	112° 0'	112° 4'	111° 2'	111° 2'	113° 8'	111° 06'
108° 9'	111° 8'	110° 0'	111° 0'	111° 0'	110° 7'	112° 0'	114° 2'	111° 5'	111° 8'	112° 5'	111° 9'	113° 1'	112° 7'	111° 11'
104° 89'	106° 51'	108° 11'	109° 16'	110° 82'	112° 35'	111° 99'	113° 90'	111° 47'	111° 96'	112° 34'	112° 61'	111° 71'	113° 38'	110° 46'
107° 5'	109° 1'	110° 0'	111° 2'	110° 7'	114° 0'	116° 0'	113° 0'	—	—	—	—	—	—	110° 57
—	—	101° 0'	123° 8'	105° 5'	128° 0'	136° 0'	121° 8'	113° 4'	116° 3'	110° 8'	116° 6'	114° 3'	112° 9'	111° 71'
97° 8'	107° 2'	115° 0'	110° 9'	120° 1'	112° 4'	111° 7'	103° 2'	112° 2'	110° 7'	107° 6'	109° 3'	112° 1'	113° 0'	109° 09'
108° 8'	111° 9'	107° 8'	109° 0'	116° 0'	119° 4'	106° 8'	111° 0'	111° 7'	115° 0'	113° 0'	113° 0'	114° 3'	114° 4'	111° 23'
98° 3'	101° 4'	105° 4'	98° 4'	96° 4'	132° 4'	0° 2'	120° 1'	117° 0'	153° 1'	105° 1'	83° 1'	132° 3'	124° 0'	106° 77'
109° 4'	109° 8'	112° 8'	108° 4'	110° 4'	117° 6'	110° 5'	112° 4'	115° 2'	109° 0'	103° 0'	104° 7'	113° 0'	112° 8'	111° 76'
109° 4'	109° 6'	112° 8'	113° 0'	108° 8'	109° 1'	109° 0'	109° 3'	110° 8'	113° 2'	114° 0'	112° 2'	111° 8'	112° 8'	111° 45'
109° 6'	110° 1'	118° 0'	109° 0'	109° 7'	109° 3'	110° 0'	110° 0'	—	—	—	—	—	—	110° 32'
—	—	—	—	—	—	—	—	112° 2'	111° 4'	112° 0'	112° 8'	113° 7'	114° 2'	110° 31'
97° 6'	109° 7'	110° 4'	110° 2'	110° 0'	110° 8'	113° 2'	111° 2'	112° 4'	113° 2'	113° 0'	113° 6'	114° 6'	113° 4'	110° 31'
108° 0'	107° 3'	108° 6'	109° 2'	115° 0'	109° 4'	109° 2'	110° 0'	110° 4'	105° 8'	112° 2'	114° 8'	114° 2'	115° 8'	109° 90'
101° 6'	102° 0'	106° 6'	106° 4'	109° 2'	109° 4'	109° 5'	111° 4'	109° 6'	111° 2'	112° 5'	111° 4'	112° 4'	112° 0'	108° 30'
105° 4'	108° 2'	107° 8'	109° 0'	108° 8'	115° 8'	114° 3'	112° 3'	112° 5'	112° 0'	112° 0'	121° 3'	120° 0'	120° 2'	110° 38'
105° 9'	108° 8'	110° 8'	111° 4'	116° 0'	117° 0'	116° 4'	119° 0'	117° 0'	111° 9'	98° 6'	114° 0'	114° 6'	118° 2'	111° 14'
106° 5'	109° 4'	112° 4'	112° 3'	112° 4'	112° 8'	111° 7'	112° 4'	—	—	—	—	—	—	110° 37'
—	—	—	—	—	—	—	—	111° 0'	111° 0'	111° 2'	111° 7'	112° 0'	113° 4'	110° 37'
104° 7'	106° 5'	108° 0'	109° 9'	110° 2'	111° 8'	110° 4'	111° 2'	113° 6'	120° 0'	92° 3'	120° 5'	114° 6'	112° 1'	110° 45'
88° 0'	98° 6'	101° 8'	103° 9'	107° 4'	109° 2'	110° 2'	111° 0'	111° 2'	117° 5'	118° 4'	115° 6'	118° 4'	116° 0'	103° 33'
101° 6'	128° 4'	126° 4'	107° 4'	113° 4'	111° 3'	109° 6'	107° 0'	106° 9'	108° 4'	109° 8'	109° 3'	109° 6'	110° 0'	104° 52'
101° 4'	111° 7'	108° 3'	109° 3'	112° 2'	111° 9'	109° 4'	110° 0'	110° 0'	112° 0'	112° 0'	112° 4'	109° 4'	112° 0'	109° 40'
101° 6'	107° 0'	111° 0'	110° 0'	110° 7'	110° 4'	115° 4'	113° 2'	107° 4'	110° 6'	111° 0'	111° 4'	111° 6'	112° 2'	109° 33'
107° 6'	109° 4'	110° 4'	110° 4'	110° 7'	113° 0'	114° 4'	114° 0'	—	—	—	—	—	—	110° 23'
—	—	—	—	—	—	—	—	110° 8'	113° 5'	112° 2'	113° 4'	114° 5'	115° 4'	110° 17
109° 5'	110° 0'	110° 2'	116° 0'	112° 4'	109° 2'	109° 8'	113° 8'	112° 0'	111° 5'	110° 6'	112° 5'	115° 3'	116° 0'	111° 55'
107° 4'	108° 8'	110° 4'	110° 6'	111° 4'	111° 0'	112° 7'	111° 4'	112° 5'	111° 9'	112° 0'	111° 6'	109° 4'	114° 5'	110° 67'
107° 4'	108° 4'	108° 6'	116° 6'	116° 6'	111° 2'	111° 5'	111° 8'	112° 4'	119° 2'	124° 6'	117° 6'	100° 2'	116° 0'	111° 21'
115° 0'	119° 3'	108° 4'	115° 6'	114° 2'	106° 4'	112° 7'	115° 4'	107° 6'	110° 0'	95° 0'	120° 0'	124° 0'	120° 4'	113° 75'
107° 1'	113° 2'	—	—	—	—	—	—	—	—	—	—	—	—	110° 75'
106° 49'	109° 51'	109° 63'	112° 13'	112° 87'	112° 50'	113° 19'	112° 68'	111° 83'	111° 68'	110° 65'	112° 96'	112° 85'	114° 47'	110° 67'

* Omitted in the Means, on account of the great influence of a disturbance on that day.

* Ten minutes late.

† Seven minutes late.

* Eight minutes late.

see on those days.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Cottingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
MAY.	Sc. Div. 115°8	Sc. Div. 119°4	Sc. Div. 121°8	Sc. Div. 120°0	Sc. Div. 117°4	Sc. Div. 110°8	Sc. Div. 107°3	Sc. Div. 107°0	Sc. Div. 105°4	Sc. Div. 109°5	Sc. Div. 106°4	Sc. Div. 109°4
1	—	—	—	—	—	—	—	—	—	—	—	—
2	114°9	115°5	115°2	113°4	112°8	107°2	104°3	102°0	103°0	104°4	106°6	109°4
3	115°4	118°4	119°4	117°0	111°6	105°0	101°8	99°2	99°4	101°7	104°2	107°9
4	116°6	118°2	119°6	117°8	112°4	105°6	101°2	99°4	99°2	100°8	103°4	106°6
5	116°6	116°8	119°2	119°2	115°5	110°0	107°4	105°2	103°9	105°3	107°7	111°0
6	120°0	117°4	119°2	118°0	114°4	110°4	107°4	106°5	104°4	105°6	106°4	108°3
7 ^a	94°4	95°6	101°5	98°8	106°2	103°0	109°2	112°6	111°8	114°0	114°4	114°4
8	—	—	—	—	—	—	—	—	—	—	—	—
9	118°7	118°4	118°6	112°2	108°8	106°0	104°2	104°4	104°6	105°4	106°6	108°9
10	115°0	116°6	115°0	110°4	106°5	105°4	104°2	104°6	104°7	107°5	107°8	108°4
11	116°8	116°4	114°2	110°7	105°2	100°0	97°8	97°4	100°0 ^b	102°6	106°4	109°4
12	118°0	120°0	118°1	114°2	106°4	100°4	96°4	96°6	99°3	102°6	106°6	110°3
13	118°0	120°2	119°9	116°4	111°2	104°2	100°4	101°2	103°4	104°0	106°6	107°8
14	131°4	128°5	128°4	117°5	108°6	94°7	97°3	92°3	96°9	99°3	107°5	108°3
15	—	—	—	—	—	—	—	—	—	—	—	—
16	116°8	118°8	118°8	118°4	113°6	105°4	104°3	105°4	101°4	100°4	104°0	106°4
17	120°5	122°9	121°2	119°4	118°5	112°3	107°0	106°1	104°4	105°0	106°4	109°4
18	121°3	117°6	118°0	117°4	112°4	110°0	108°0	105°6	104°1	104°0	106°4	108°0
19	119°4	120°4	116°0	112°4	103°6	100°0	105°4	101°0	101°4 ^d	107°6	104°4	116°0
20	117°6	118°8	118°6	116°0	112°4	103°8	102°4	100°0	100°8	104°4	105°8	113°4
21	116°8	118°6	118°4	117°4	112°0	106°4	104°8	103°3	104°4	106°3	107°5	110°4
22	—	—	—	—	—	—	—	—	—	—	—	—
23	115°0	116°8	115°2	112°8	109°6	106°1	103°8	102°0	102°4	104°4	105°8	107°3
24	117°6	118°4	117°5	114°5	109°8	106°0	105°4	102°4	102°4	104°4	106°4	108°3
25	122°9	122°4	120°8	118°4	114°4	105°6	103°2	101°6	104°7	108°0	111°4	112°5
26	124°0	122°4	121°4	118°8	112°2	105°0	103°4	101°4	101°2	102°4	106°8	104°5
27	118°7	115°4	116°2	115°5	107°4	105°5	104°4	105°4	100°4	101°9	105°9	108°0
28 ^a	124°7	121°9	122°5	119°4	105°6	104°2	102°8	103°0	104°8	106°0	106°6	109°0
29	—	—	—	—	—	—	—	—	—	—	—	—
30	116°6	117°4	117°3	116°3	111°4	111°4	107°4	105°4	105°0	104°6	107°4	108°2
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	117°70	118°35	118°19	115°37	110°88	105°35	103°72	102°05	102°86	104°77	106°80	109°38
JUNE.	120°0	122°0	118°8	115°4	112°5	104°8	102°4	94°8	98°8	101°0	102°4	105°8
1	111°5	116°0	117°4	116°4	112°2	107°4	103°8	105°6	102°2	102°8	102°8	106°4
2	118°2	117°6	117°0	116°4	114°4	110°1	105°6	102°5	103°7	105°4	105°7	108°4
3	114°4	116°8	117°4	114°8	110°2	106°4	109°4	103°2	104°1	104°6	105°4	106°6
4	117°4	119°8	117°6	116°4	111°4	105°4	102°7	101°8	102°4	104°4	107°6	109°0
5	—	—	—	—	—	—	—	—	—	—	—	—
6	120°4	119°0	121°5	119°2	114°0	105°2	102°0	101°6	103°0	107°4	108°4	110°5
7	122°2	124°2	121°6	115°0	111°4	107°0	103°9	104°0	104°2	105°6	108°7	112°0
8	120°5	119°9	118°7	115°8	106°8	104°2	103°0	102°0	101°3	102°2	102°8	105°6
9	117°2	113°0	116°0	112°5	111°1	103°4	91°7	98°2	102°6	105°4	106°1	108°3
10	118°8	119°4	119°2	118°6	109°6	112°2	103°9	102°6	102°6	99°8	102°2	108°4
11	121°4	123°2	122°4	117°0	113°4	109°2	103°4	102°6	98°6	97°4	104°6	100°5
12	—	—	—	—	—	—	—	—	—	—	—	—
13	116°2	109°4	114°9	112°4	110°8	110°4	108°2	99°5	102°2	106°4	107°2	111°0
14	120°4	120°4	122°8	121°8	121°4	112°1	106°7	103°4	102°5	101°0	103°0	104°4
15	115°5	115°6	118°5	115°8	112°9	105°4	102°9	100°6	103°6	104°6	106°6	105°2
16	122°6	119°5	119°6	116°4	115°8	109°2	104°6	101°4	102°4	102°6	102°6	107°4
17	113°6	118°4	118°4	117°4	114°4	111°0	106°0	100°8	101°6	102°4	110°8	110°9
18	116°8	119°0	119°8	117°8	112°2	106°6	103°0	101°9	101°2	102°5	105°3	109°0
19	—	—	—	—	—	—	—	—	—	—	—	—
20	119°9	121°2	121°2	120°4	117°4	110°2	103°7	100°4	98°3	98°4	105°2	102°4
21	115°4	122°3	122°0	119°7	117°4	107°3 ^b	103°5	101°3	101°4	102°4	105°0	109°6
22	115°4	119°0	119°6	119°4	115°8	109°4	104°6	99°0	98°8	101°8	105°5	106°9
23	115°5	117°4	117°8	115°5	111°4	106°4	102°5	102°4	103°4	105°4	107°0	110°1
24	114°9	116°2	115°9	113°5	109°6	106°8	103°6	101°4	102°0	105°4	107°4	107°4
25	118°8	117°4	117°4	117°8	109°0	102°6	100°4	103°4	101°4	105°4	106°4	110°0
26	—	—	—	—	—	—	—	—	—	—	—	—
27	119°9	119°6	118°9	115°4	112°6	111°3	105°4	100°7	104°4	104°2	107°4	112°2
28	114°4	119°4	118°4	114°2	112°4	111°6	102°2	101°2	102°0	102°4	105°4	106°7
29	117°6	119°8	118°9	116°6	113°4	108°2	105°4	106°3	104°0	104°9	104°9	107°3
30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	117°65	118°67	118°91	116°66	112°83	107°84	103°63	101°64	102°14	103°42	105°63	107°77

^a Omitted in the Means, in consequence of the influence of disturbance on those days.^b Seven minutes late.

		DECLINATION.												
		Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.												
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
06° 4	109° 4	118° 0	113° 4	109° 6	112° 4	108° 5	110° 8	112° 3	110° 4	111° 2	110° 5	110° 2	113° 4	112° 12 } 110° 90
06° 6	109° 4	109° 2	115° 4	112° 2	113° 0	112° 2	110° 8	110° 2	110° 0	110° 4	110° 4	111° 3	111° 4	110° 22
04° 2	107° 9	112° 0	111° 5	111° 2	109° 8	110° 2	109° 2	109° 6	109° 6	107° 6	111° 5	112° 9	115° 0	109° 63
03° 4	106° 6	110° 6	112° 6	110° 5	110° 4	110° 8	110° 2	110° 4	110° 0	112° 4	112° 4	112° 7	116° 4	110° 01
07° 7	111° 0	112° 4	111° 7	111° 4	110° 2	110° 3	110° 2	111° 0	113° 0	113° 6	102° 8	112° 6	114° 8	111° 32
06° 4	108° 3	111° 2	109° 0	129° 2	112° 8	121° 5	131° 2	125° 2	12° 7	130° 3	118° 2	98° 4	102° 4	110° 00
14° 4	114° 4	114° 8	111° 4	110° 5	109° 3	109° 4	109° 3	112° 0	111° 8	105° 1	110° 2	115° 8	114° 4	108° 75
06° 6	108° 9	109° 2	108° 6	108° 1	109° 4	110° 0	109° 6	109° 6	116° 4	111° 9	111° 4	112° 4	113° 8	110° 31
07° 8	108° 4	107° 8	108° 9	109° 0	109° 4	109° 2	109° 4	109° 6	109° 4	112° 0	113° 4	114° 4	115° 8	109° 77
06° 4	109° 4	111° 0	111° 4	114° 6	109° 4	109° 0	109° 2	110° 2	111° 0	110° 4	109° 6	111° 0	115° 2	108° 70
06° 6	110° 3	110° 4	111° 0	108° 2	108° 4	109° 2	113° 5	109° 8	110° 4	111° 0	112° 0	113° 5	115° 4	109° 24
06° 6	107° 8	107° 8	107° 8	107° 9	108° 5	109° 3	109° 6	110° 5	110° 0	113° 5	115° 0	123° 0	141° 4	111° 55
07° 5	108° 3	108° 4	115° 8	100° 0	105° 4	119° 2	111° 2	110° 4	109° 4	109° 6	111° 0	113° 4	114° 2	109° 95
04° 0	106° 4	109° 8	112° 0	114° 0	109° 6	113° 4	110° 4	114° 4	110° 5	112° 4	104° 8	112° 0	119° 3	110° 68
06° 4	109° 4	110° 8	111° 4	112° 2	111° 6	114° 2	113° 2	115° 2	111° 4	102° 8	109° 5	116° 2	116° 6	112° 42
06° 4	108° 0	110° 3	110° 4	106° 2	115° 8	110° 5	118° 4	112° 6	113° 6	106° 3	116° 3	117° 4	115° 8	111° 93
04° 4	116° 0	108° 8	109° 4	112° 8	112° 7	108° 4	110° 5	113° 5	113° 2	111° 4	111° 4	109° 0	110° 0	109° 95
05° 8	113° 4	113° 6	112° 3	112° 7	111° 8	111° 8	114° 4	114° 0	108° 6	108° 2	108° 5	111° 6	114° 0	110° 65
07° 5	110° 4	111° 0	109° 6	108° 6	110° 2	109° 5	109° 2	110° 4	109° 0	111° 2	111° 0	111° 4	113° 2	110° 44
05° 8	107° 3	107° 5	107° 6	106° 7	106° 4	106° 0	108° 4	108° 6	112° 4	112° 5	112° 4	115° 0	115° 6	109° 18
06° 4	108° 3	109° 3	108° 2	107° 0	106° 4	109° 2	110° 0	115° 4	110° 8	110° 6	116° 0	116° 6	119° 2	110° 49
11° 4	112° 5	112° 2	110° 2	110° 5	108° 8	109° 3	109° 4	109° 6	110° 0	110° 0	110° 2	114° 0	117° 0	111° 55
06° 8	104° 5	108° 4	104° 5	107° 9	106° 9	107° 0	123° 0	110° 0	112° 4	111° 4	116° 0	113° 2	116° 2	110° 85
05° 9	108° 0	111° 9	112° 2	113° 4	115° 4	111° 2	111° 4	111° 4	124° 0	81° 8	110° 6	115° 4	125° 5	110° 37
06° 6	109° 0	110° 4	108° 7	108° 5	109° 2	109° 4	109° 3	106° 8	107° 0	107° 8	110° 4	112° 8	114° 6	110° 22
07° 4	108° 2	110° 4	110° 6	110° 0	108° 4	109° 6	109° 6	112° 4	112° 5	111° 5	111° 2	115° 6	116° 0	111° 22
06° 80	109° 38	111° 00	110° 58	109° 61	109° 72	110° 23	111° 20	111° 19	110° 95	110° 20	111° 08	113° 67	116° 20	110° 46
02° 4	105° 8	114° 0	114° 8	108° 4	109° 0	107° 2	107° 4	107° 5	106° 4	107° 4	108° 2	108° 0	104° 4	108° 39
02° 8	106° 4	108° 2	108° 2	108° 3	110° 6	110° 0	112° 8	112° 8	113° 4	110° 4	109° 2	115° 6	113° 6	109° 90
05° 7	108° 4	108° 0	110° 6	110° 4	113° 4	112° 4	110° 0	108° 6	103° 2	111° 2	111° 0	111° 4	113° 2	110° 60
05° 4	106° 6	108° 4	109° 1	109° 2	109° 4	109° 2	109° 2	113° 0	111° 2	110° 4	110° 4	111° 5	112° 0	109° 85
07° 6	109° 0	109° 2	109° 2	109° 0	108° 5	109° 2	109° 3	117° 0	111° 2	110° 0	110° 4	111° 5	116° 4	110° 28
08° 4	110° 5	110° 5	110° 0	112° 5	116° 4	116° 6	117° 9	117° 0	116° 4	114° 2	121° 9	119° 4	121° 6	113° 61
08° 7	112° 0	110° 8	109° 6	109° 5	108° 6	108° 6	113° 7	110° 6	110° 2	104° 6	110° 0	113° 8	121° 4	111° 30
02° 8	105° 6	110° 7	107° 4	108° 4	108° 2	109° 6	113° 4	112° 2	109° 6	111° 7	112° 5	113° 6	114° 0	109° 75
06° 1	108° 3	107° 0	107° 4	108° 4	108° 3	117° 7	116° 4	111° 8	110° 0	105° 8	107° 0	115° 4	115° 8	109° 02
02° 2	108° 4	110° 8	109° 4	133° 8	112° 3	107° 6	108° 4	108° 1	108° 4	110° 0	110° 9	109° 6	117° 8	111° 02
04° 6	100° 5	99° 0	115° 6	121° 4	111° 4	119° 2	119° 0	132° 4	111° 4	117° 4	113° 2	113° 0	112° 2	112° 45
07° 2	111° 0	105° 4	106° 2	108° 9	105° 2	112° 2	109° 4	109° 4	111° 4	111° 0	111° 4	111° 8	116° 4	109° 47
03° 0	104° 4	106° 4	110° 4	110° 4	110° 0	117° 4	113° 6	111° 2	108° 4	109° 4	111° 0	112° 5	113° 4	111° 54
06° 6	105° 2	108° 0	108° 4	108° 0	106° 4	110° 4	108° 8	108° 2	108° 7	110° 7	104° 9	111° 7	116° 1	109° 06
02° 6	107° 4	109° 2	118° 4	108° 4	108° 1	110° 0	117° 5	112° 4	104° 8	105° 0	110° 0	111° 4	111° 4	110° 43
10° 8	110° 9	112° 8	110° 5	113° 0	115° 5	115° 0	116° 0	115° 2	110° 2	109° 5	108° 4	110° 6	114° 0	111° 52
05° 3	109° 0	109° 2	111° 0	108° 8	109° 2	109° 2	109° 4	109° 6	109° 8	109° 5	111° 2	110° 6	114° 5	109° 88
05° 2	102° 4	104° 4	105° 8	106° 0	106° 4	109° 3	110° 0	109° 8	109° 9	109° 9	111° 2	111° 2	107° 4	109° 17
05° 0	109° 6	111° 0	114° 0	109° 2	108° 6	110° 5	109° 8	109° 4	110° 0	109° 2	109° 7	110° 6	113° 3	110° 53
05° 5	106° 9	109° 4	109° 3	109° 4	109° 0	108° 0	108° 6	108° 8	109° 4	110° 0	110° 0	110° 4	112° 3	109° 37
07° 0	110° 1	110° 4	110° 0	110° 2	110° 3	109° 4	108° 5	108° 8	109° 5	110° 4	112° 0	114° 5	114° 0	110° 12
07° 4	107° 4	107° 6	108° 2	108° 6	108° 2	108° 0	109° 6	111° 4	109° 6	110° 1	111° 0	112° 4	114° 9	109° 32
06° 4	110° 0	112° 6	110° 0	105° 8	106° 4	107° 4	109° 4	108° 9	109° 3	109° 9	110° 8	113° 3	113° 0	109° 57
07° 4	112° 2	114° 0	114° 8	110° 2	111° 4	109° 6	110° 4	110° 4	110° 0	107° 9	112° 4	112° 9	112° 2	111° 17
05° 4	106° 7	109° 6	110° 2	109° 6	108° 5	111° 2	111° 0	114° 0	119° 0	112° 4	97° 6	116° 4	116° 4	110° 26
04° 9	107° 3	106° 6	107° 2	108° 9	118° 4	121° 4	116° 2	116° 4	116° 0	112° 4	111° 0	112° 0	116° 4	112° 09
05° 63	107° 77	108° 97	110° 22	110° 57	110° 14	111° 40	111° 76	112° 11	110° 28	110° 02	110° 28	112° 50	114° 16	110° 38

* Nine minutes late.

* Five minutes late.

* Four minutes late.

* Eight minutes late.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0°.721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JULY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	121°2	123°5	122°0	120°9	111°0	111°0	103°4	105°6	106°7	104°9	106°4	108°4
	2 117°4	119°3	121°0	117°4	113°9	109°4	104°2	102°2	104°4	105°6	107°0	107°4
	3 117°8	119°6	120°4	121°2	110°6	106°8	104°4	103°8	104°6	104°4	105°4	109°5
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 119°0	121°4	118°4	114°2	112°4	105°6	103°2	103°4	103°6	107°6	108°8	109°2
	6 122°2	123°4	118°8	115°5	112°2	109°7	106°1	103°9	106°8	106°0	107°4	108°3
	7 119°8	120°4	121°5	117°4	114°3	97°3	94°4	101°6	101°7	101°5	104°0	106°4
	8 116°4	116°0	114°0	109°0	109°4	106°0	104°3	104°4	105°4	105°4	106°4	112°8
	9 119°2	119°6	116°2	114°6	111°4	107°5	102°4	105°4	99°4	101°4	96°2	102°6
	10 121°8	123°6	123°9	123°2	119°3	111°5	108°9	102°2	109°9	104°4	106°5	110°4
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 122°8	123°4	122°0	118°2	114°6	111°5	105°4	98°6	101°0	102°2	103°4	110°4
	13 119°4	122°5	125°3	121°0	113°2	106°2	101°2	99°4	99°2	99°4	103°4	106°4
	14 117°4	123°4	123°4	120°6	110°4	103°4	100°4	100°7	101°5	101°2	105°4	110°2
	15 120°0	122°4	123°0	120°8	115°4	108°4	104°4	100°5	99°4	101°2	103°8	108°1
	16 119°2	120°0	120°5	117°6	112°4	107°2	101°6	100°0	101°3	101°4	101°4	104°1
	17 114°5	113°4	113°4	116°8	112°2	108°9	101°9	100°4	96°4	103°0	105°9	107°3
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 118°4	120°5	120°8	118°4	113°4	110°4	105°2	105°4	104°4	105°2	107°4	110°2
	20 117°4	116°0	118°4	116°4	114°3	108°4	103°4	101°4	101°2	103°9	107°6	109°8
	21 118°3	121°2	120°4	115°8	110°2	106°4	102°4	98°2	98°2	103°0	106°8	110°3
	22 124°2	124°4	122°5	117°8	113°7	107°8	101°2	97°2	101°2	104°2	107°4	110°8
	23 121°4	121°6	118°4	117°3	113°4	106°6	106°3	101°0	103°1	105°0	109°1	112°4
	24 118°2	121°4	121°2	119°1	113°6	107°2	103°2	102°9	106°2	110°0	110°4	110°8
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 118°0	119°4	120°4	113°4	104°0	104°5	95°5	98°4	98°5	103°0	109°4	110°4
	27 120°9	120°9	120°1	117°4	109°9	105°9	104°4	104°6	106°6	108°4	110°8	115°3
	28 118°5	122°2	119°2	115°2	105°9	103°4	100°6	101°4	105°2	106°5	110°2	111°2
	29 119°4	118°6	118°4	116°4	112°7	109°4	101°2	102°5	103°4	106°0	107°4	109°4
	30 120°0	123°3	123°4	120°4	111°6	105°0	102°9	101°9	99°6	105°4	106°4	109°9
	31 118°8	121°0	123°6	123°0	117°2	108°6	104°6	102°6	101°4	104°3	107°4	110°4
August 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	119°32	120°83	120°39	117°74	112°32	107°18	103°15	101°69	102°60	104°24	106°36	109°35
AUGUST.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2 118°2	121°8	124°2	123°0	119°5	113°4	105°2	100°4	98°8	98°4	103°4	108°3
	3 121°0	124°6	119°4	118°6	115°9	111°4	107°8	103°8	101°3	104°5	105°5	106°4
	4 115°4	129°8	125°4	114°8	114°6	110°2	104°7	103°3	104°7	106°0	106°6	109°0
	5 121°3	124°4	121°1	124°2	111°9	110°9	104°5	100°6	103°9	105°6	105°6	109°2
	6 123°4	127°4	125°0	124°6	112°6	107°6	103°9	95°0	100°4	104°6	107°4	106°2
	7 116°6	121°5	122°2	117°4	112°0	105°4	101°5	99°2	102°8	107°2	116°2	110°4
	8 —	—	—	—	—	—	—	—	—	—	—	—
	9 117°3	120°2	120°6	118°4	111°2	105°4	101°7	98°3	98°0	100°3	103°9	107°5
	10 119°4	120°0	122°4	121°6	114°0	108°8	100°4	95°4	96°6	99°6	103°8	107°9
	11 117°4	121°3	121°6	120°4	110°4	105°4	98°9	96°6	97°9	102°8	104°6	108°4
	12 117°4	122°0	123°3	119°2	113°5	106°6	98°6	94°6	96°4	98°8	103°2	108°4
	13 118°2	120°0	120°8	120°4	114°4	105°2	97°9	96°4	98°4	101°4	104°6	107°5
	14 125°4	124°2	122°8	118°0	104°8	107°8	83°4	96°4	96°6	99°3	103°6	107°6
	15 —	—	—	—	—	—	—	—	—	—	—	—
	16 116°2	120°4	125°5	123°6	115°6	106°3	100°3	93°8	94°8	109°6	102°6	105°4
	17 121°7	130°3	127°2	120°5	117°9	110°0	110°2	98°0	97°6	98°5	103°7	106°4
	18 121°9	126°3	126°9	121°8	115°4	109°7	101°9	96°0	96°8	98°8	98°4	122°4
	19 119°9	122°9	121°6	116°6	109°0	103°6	99°4	99°0	102°2	106°0	110°4	138°9
	20 117°8	121°4	121°4	114°0	110°2	107°5	105°4	104°0	107°6	107°4	108°3	108°9
	21 118°6	121°8	122°6	118°0	108°4	102°9	100°4	98°5	97°0	98°5	105°9	107°6
	22 —	—	—	—	—	—	—	—	—	—	—	—
	23 121°4	123°8	122°3	116°0	109°5	103°9	99°0	98°8	102°5	104°2	108°2	111°6
	24 122°0	120°5	124°3	119°8	111°9	103°2	98°9	100°7	101°6	105°4	106°6	111°4
	25 112°5	116°6	111°2	120°0	106°2	101°6	100°4	100°7	101°6	102°8	106°6	111°3
	26 124°0	121°0	118°0	116°2	111°8	105°2	100°4	98°4	99°8	102°3	105°7	108°5
	27 119°5	121°8	120°7	118°0	114°5	106°7	99°4	96°1	98°2	102°2	107°5	108°9
	28 118°5	125°0	124°6	118°8	111°4	101°6	95°4	97°4	98°2	101°4	107°0	111°4
	29 —	—	—	—	—	—	—	—	—	—	—	—
	30 ^a —	—	—	—	—	—	—	—	—	—	—	—
	31 ^a —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	119°50	122°57	122°42	119°33	112°36	106°80	100°82	98°39	99°72	102°73	105°80	108°31

^a The Observations omitted, the Magnet having been affected considerably by the vertical iron shafts of Robinson's Anemometer.

		DECLINATION.													
		Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.													
0 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
6 ^h 4	108 ^h 4	111 ^h 4	111 ^h 6	110 ^h 6	110 ^h 0	115 ^h 8	109 ^h 2	109 ^h 8	109 ^h 3	109 ^h 5	110 ^h 5	111 ^h 6	113 ^h 4	111 ^h 78	
7 ^h 0	107 ^h 4	108 ^h 8	110 ^h 4	119 ^h 4	108 ^h 9	108 ^h 7	109 ^h 3	109 ^h 7	109 ^h 7	111 ^h 4	111 ^h 0	111 ^h 0	111 ^h 0	110 ^h 35	
5 ^h 4	109 ^h 5	109 ^h 0	109 ^h 5	110 ^h 0	109 ^h 4	109 ^h 4	107 ^h 5	—	—	—	—	—	—	110 ^h 72	
8 ^h 8	109 ^h 2	108 ^h 9	109 ^h 1	109 ^h 7	109 ^h 4	109 ^h 3	110 ^h 0	111 ^h 6	112 ^h 0	111 ^h 1	111 ^h 5	111 ^h 5	116 ^h 4	110 ^h 72	
7 ^h 4	108 ^h 3	109 ^h 6	110 ^h 0	109 ^h 8	110 ^h 9	119 ^h 4	110 ^h 6	111 ^h 4	110 ^h 2	113 ^h 0	114 ^h 6	110 ^h 8	118 ^h 4	111 ^h 89	
4 ^h 0	106 ^h 4	107 ^h 4	107 ^h 4	108 ^h 0	107 ^h 2	127 ^h 4	122 ^h 8	117 ^h 4	108 ^h 4	111 ^h 1	112 ^h 2	112 ^h 4	110 ^h 0	111 ^h 10	
6 ^h 4	112 ^h 8	113 ^h 2	115 ^h 0	108 ^h 2	108 ^h 5	109 ^h 6	110 ^h 1	111 ^h 2	111 ^h 0	111 ^h 6	112 ^h 3	112 ^h 9	116 ^h 4	110 ^h 40	
6 ^h 2	102 ^h 6	99 ^h 6	95 ^h 0	104 ^h 0	78 ^h 5	124 ^h 8	126 ^h 4	122 ^h 6	127 ^h 4	115 ^h 2	109 ^h 6	115 ^h 4	119 ^h 8	109 ^h 76	
6 ^h 5	110 ^h 4	108 ^h 4	108 ^h 0	117 ^h 4	114 ^h 6	112 ^h 6	112 ^h 0	—	—	—	—	—	—	110 ^h 72	
3 ^h 4	110 ^h 4	111 ^h 7	112 ^h 0	121 ^h 2	109 ^h 5	111 ^h 4	108 ^h 0	108 ^h 5	114 ^h 4	97 ^h 4	104 ^h 6	111 ^h 4	112 ^h 4	111 ^h 97	
3 ^h 4	106 ^h 4	110 ^h 4	110 ^h 4	122 ^h 4	108 ^h 8	109 ^h 4	106 ^h 4	108 ^h 4	109 ^h 4	110 ^h 5	111 ^h 7	113 ^h 4	112 ^h 0	110 ^h 97	
5 ^h 4	110 ^h 2	111 ^h 6	109 ^h 4	110 ^h 2	108 ^h 4	108 ^h 3	109 ^h 9	112 ^h 5	109 ^h 5	109 ^h 0	108 ^h 3	111 ^h 6	115 ^h 4	110 ^h 09	
3 ^h 8	108 ^h 1	109 ^h 4	110 ^h 9	109 ^h 8	109 ^h 2	109 ^h 0	109 ^h 5	110 ^h 4	109 ^h 0	109 ^h 3	109 ^h 5	111 ^h 5	115 ^h 4	110 ^h 43	
1 ^h 4	104 ^h 1	104 ^h 0	108 ^h 4	108 ^h 4	108 ^h 4	110 ^h 2	110 ^h 2	111 ^h 4	108 ^h 4	109 ^h 8	110 ^h 2	101 ^h 8	110 ^h 4	108 ^h 68	
3 ^h 9	107 ^h 3	110 ^h 2	106 ^h 4	105 ^h 4	106 ^h 6	108 ^h 4	109 ^h 4	—	—	—	—	—	—	108 ^h 44	
7 ^h 4	110 ^h 2	110 ^h 4	108 ^h 2	108 ^h 0	108 ^h 5	109 ^h 4	111 ^h 6	109 ^h 5	109 ^h 5	109 ^h 4	110 ^h 4	111 ^h 8	111 ^h 4	110 ^h 66	
7 ^h 6	109 ^h 8	110 ^h 8	109 ^h 6	109 ^h 4	109 ^h 4	110 ^h 2	110 ^h 8	111 ^h 2	110 ^h 2	112 ^h 0	110 ^h 0	111 ^h 4	114 ^h 6	110 ^h 28	
6 ^h 8	110 ^h 3	111 ^h 8	110 ^h 0	108 ^h 4	108 ^h 0	108 ^h 9	110 ^h 7	127 ^h 6	117 ^h 6	116 ^h 4	112 ^h 8	110 ^h 2	119 ^h 0	111 ^h 19	
7 ^h 4	110 ^h 8	110 ^h 0	108 ^h 4	106 ^h 9	110 ^h 4	134 ^h 4	128 ^h 4	118 ^h 4	110 ^h 4	103 ^h 6	111 ^h 5	112 ^h 8	115 ^h 5	112 ^h 63	
9 ^h 1	112 ^h 4	110 ^h 9	109 ^h 4	110 ^h 4	112 ^h 8	110 ^h 5	111 ^h 8	111 ^h 6	112 ^h 4	111 ^h 4	112 ^h 2	112 ^h 4	115 ^h 0	111 ^h 52	
10 ^h 4	110 ^h 8	114 ^h 4	112 ^h 5	109 ^h 4	109 ^h 4	115 ^h 5	125 ^h 0	—	—	—	—	—	—	112 ^h 21	
9 ^h 4	110 ^h 4	111 ^h 5	109 ^h 4	110 ^h 6	115 ^h 5	108 ^h 0	109 ^h 7	109 ^h 3	109 ^h 5	110 ^h 2	109 ^h 4	112 ^h 2	112 ^h 0	112 ^h 21	
10 ^h 8	115 ^h 3	115 ^h 5	111 ^h 8	112 ^h 3	111 ^h 5	112 ^h 0	111 ^h 0	112 ^h 3	120 ^h 5	120 ^h 1	115 ^h 2	113 ^h 4	116 ^h 4	109 ^h 82	
10 ^h 2	111 ^h 2	112 ^h 0	110 ^h 8	107 ^h 6	108 ^h 6	109 ^h 4	109 ^h 6	110 ^h 0	110 ^h 5	109 ^h 9	109 ^h 3	113 ^h 1	116 ^h 4	110 ^h 28	
7 ^h 4	109 ^h 4	110 ^h 6	110 ^h 9	110 ^h 6	112 ^h 8	112 ^h 8	114 ^h 4	111 ^h 2	113 ^h 8	114 ^h 5	117 ^h 4	110 ^h 8	112 ^h 5	111 ^h 67	
6 ^h 4	109 ^h 9	110 ^h 7	109 ^h 5	110 ^h 7	115 ^h 4	117 ^h 5	123 ^h 2	114 ^h 6	111 ^h 0	111 ^h 1	112 ^h 4	112 ^h 6	112 ^h 1	112 ^h 11	
7 ^h 4	110 ^h 4	111 ^h 6	109 ^h 0	110 ^h 4	111 ^h 2	116 ^h 4	113 ^h 1	—	—	—	—	—	—	112 ^h 11	
—	—	—	—	—	—	—	—	110 ^h 4	110 ^h 0	111 ^h 6	111 ^h 2	111 ^h 0	107 ^h 6	111 ^h 52	
6 ^h 36	109 ^h 35	110 ^h 14	109 ^h 37	109 ^h 67	108 ^h 96	113 ^h 28	112 ^h 99	112 ^h 48	111 ^h 50	110 ^h 93	111 ^h 70	111 ^h 50	113 ^h 17	110 ^h 91	
3 ^h 4	108 ^h 3	110 ^h 4	110 ^h 7	108 ^h 6	110 ^h 0	109 ^h 2	109 ^h 8	110 ^h 0	113 ^h 8	111 ^h 9	113 ^h 6	116 ^h 2	117 ^h 4	111 ^h 51	
5 ^h 5	106 ^h 4	108 ^h 4	109 ^h 5	110 ^h 4	106 ^h 9	107 ^h 5	109 ^h 0	110 ^h 2	117 ^h 4	114 ^h 2	113 ^h 4	118 ^h 6	120 ^h 0	111 ^h 90	
6 ^h 6	109 ^h 0	110 ^h 4	109 ^h 6	108 ^h 4	117 ^h 5	128 ^h 4	117 ^h 1	116 ^h 1	119 ^h 4	122 ^h 2	108 ^h 8	128 ^h 4	123 ^h 9	114 ^h 78	
5 ^h 6	109 ^h 2	108 ^h 4	122 ^h 4	114 ^h 4	127 ^h 6	120 ^h 4	117 ^h 6	110 ^h 4	108 ^h 6	106 ^h 8	101 ^h 5	111 ^h 5	119 ^h 4	113 ^h 01	
7 ^h 4	106 ^h 2	113 ^h 4	112 ^h 2	111 ^h 2	113 ^h 9	109 ^h 4	113 ^h 4	118 ^h 2	115 ^h 0	114 ^h 2	110 ^h 0	108 ^h 4	107 ^h 4	111 ^h 87	
6 ^h 2	110 ^h 4	126 ^h 6	111 ^h 8	118 ^h 9	125 ^h 5	116 ^h 4	116 ^h 0	—	—	—	—	—	—	113 ^h 42	
3 ^h 9	107 ^h 5	111 ^h 2	109 ^h 0	108 ^h 4	109 ^h 4	110 ^h 6	114 ^h 6	115 ^h 6	112 ^h 6	111 ^h 6	112 ^h 2	109 ^h 6	115 ^h 4	110 ^h 12	
3 ^h 8	107 ^h 9	110 ^h 6	109 ^h 9	109 ^h 8	109 ^h 4	111 ^h 3	110 ^h 4	115 ^h 4	109 ^h 6	110 ^h 2	112 ^h 0	112 ^h 2	114 ^h 1	109 ^h 99	
1 ^h 6	108 ^h 4	110 ^h 4	108 ^h 7	110 ^h 0	109 ^h 2	109 ^h 8	110 ^h 2	119 ^h 4	110 ^h 6	109 ^h 6	110 ^h 8	111 ^h 8	114 ^h 4	110 ^h 02	
3 ^h 2	108 ^h 4	110 ^h 0	110 ^h 6	108 ^h 8	109 ^h 1	109 ^h 4	109 ^h 3	109 ^h 4	109 ^h 5	110 ^h 4	110 ^h 2	111 ^h 6	113 ^h 9	109 ^h 34	
1 ^h 6	107 ^h 5	109 ^h 5	109 ^h 4	110 ^h 8	108 ^h 7	111 ^h 4	111 ^h 6	112 ^h 2	110 ^h 4	111 ^h 6	112 ^h 4	117 ^h 6	121 ^h 4	110 ^h 51	
3 ^h 6	107 ^h 6	109 ^h 5	110 ^h 0	108 ^h 2	108 ^h 9	108 ^h 8	109 ^h 4	—	—	—	—	—	—	108 ^h 70	
2 ^h 6	105 ^h 4	—	—	—	—	—	—	110 ^h 4	110 ^h 6	110 ^h 6	111 ^h 6	109 ^h 4	111 ^h 4	108 ^h 70	
3 ^h 7	106 ^h 4	107 ^h 2	106 ^h 4	108 ^h 4	112 ^h 6	110 ^h 0	112 ^h 6	113 ^h 6	116 ^h 8	113 ^h 2	105 ^h 8	114 ^h 2	119 ^h 2	110 ^h 63</	

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0'' 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen } Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
SEPTEMBER.	1 ^a	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2 ^a	—	—	—	—	—	—	—	—	—	—	—
	3	119° 3	121° 3	122° 4	119° 2	112° 4	111° 1	106° 4	101° 7	105° 4	102° 6	104° 4
	4	114° 2	115° 3	122° 5	114° 9	111° 9	103° 6	102° 9	104° 2	106° 6	108° 4	106° 2
	5	—	—	—	—	—	—	—	—	—	—	—
	6	117° 9	119° 2	120° 4	118° 4	114° 4	105° 2	101° 2	96° 8	99° 6	104° 4	107° 4
	7	117° 6	121° 4	121° 4	120° 4	113° 9	106° 4	100° 4	100° 0	102° 0	105° 3	108° 5
	8	118° 4	121° 4	121° 2	118° 5	111° 9	113° 6	98° 2	96° 9	98° 3	101° 1	105° 4
	9	117° 6	117° 0	106° 4	108° 4	102° 4	108° 6	92° 6	91° 5	93° 0	96° 2	101° 6
	10	117° 4	122° 0	121° 5	117° 2	110° 2	104° 6	98° 8	100° 4	101° 8	105° 9	110° 2
	11	121° 0	121° 4	120° 6	117° 8	112° 4	103° 4	101° 5	98° 4	99° 6	103° 4	107° 4
	12	—	—	—	—	—	—	—	—	—	—	—
	13	121° 2	114° 8	98° 4	98° 2	100° 6	91° 6	96° 0	91° 5	100° 4	106° 5	112° 4
	14	118° 8	120° 0	119° 4	119° 2	108° 6	106° 6	103° 2	97° 5	98° 0	102° 0	106° 8
	15	118° 4	122° 7	122° 7	120° 1	114° 4	108° 3	101° 4	96° 4	96° 5	101° 0	105° 3
	16	120° 0	124° 9	127° 2	124° 4	120° 4	113° 2	101° 6	98° 4	99° 2	102° 4	105° 6
	17	115° 6	123° 4	120° 0	118° 4	116° 4	104° 4	98° 2	93° 4	99° 2	103° 4	108° 8
	18	118° 8	123° 2	122° 0	122° 8	111° 4	107° 4	104° 8	102° 4	99° 5	103° 4	106° 4
	19	—	—	—	—	—	—	—	—	—	—	—
	20	118° 8	120° 4	120° 2	116° 8	113° 2	108° 2	103° 4	101° 5	103° 4	106° 2	108° 4
	21	116° 5	118° 4	119° 4	114° 2	112° 0	103° 4	100° 5	97° 9	101° 4	105° 4	108° 9
	22	115° 2	116° 8	115° 0	112° 4	105° 3	106° 6	105° 0	101° 5	102° 4	108° 4	112° 4
	23	110° 4	114° 4	101° 8	96° 9	97° 6	96° 9	94° 4	98° 9	103° 6	109° 3	112° 5
	24	117° 9	182° 0	80° 5	83° 0	110° 1	153° 4	78° 8	124° 8	86° 3	97° 1	101° 8
	25	113° 4	116° 4	117° 4	111° 4	110° 8	103° 3	98° 2	95° 4	95° 9	99° 4	104° 5
	26	—	—	—	—	—	—	—	—	—	—	—
	27 ^a	25° 8	74° 0	83° 8	97° 6	109° 9	103° 0	94° 0	99° 2	105° 3	108° 8	110° 0
	28	115° 0	118° 2	119° 4	118° 4	112° 5	106° 9	102° 2	100° 4	100° 4	102° 3	103° 2
	29	113° 4	117° 4	120° 3	123° 5	116° 6	112° 9	109° 3	118° 0	100° 4	94° 4	101° 6
	30	112° 4	114° 5	117° 4	118° 8	122° 4	116° 4	111° 4	105° 2	101° 0	102° 6	103° 7
Hourly Means		116° 85	109° 30	118° 18	116° 06	111° 44	106° 54	101° 34	99° 62	100° 19	103° 47	107° 31
OCTOBER.	1	113° 2	117° 4	116° 5	118° 7	118° 7	113° 5	111° 6	108° 2	106° 4	106° 1	105° 2
	2	112° 5	114° 4	117° 4	115° 1	107° 0	110° 6	108° 9	106° 4	105° 3	105° 6	106° 0
	3	—	—	—	—	—	—	—	—	—	—	—
	4	113° 8	116° 4	115° 9	114° 8	112° 6	110° 3	107° 4	106° 5	107° 5	108° 4	107° 9
	5	114° 4	117° 9	118° 4	118° 8	112° 4	108° 0	103° 4	100° 4	102° 8	104° 2	102° 4
	6	114° 0	116° 7	117° 0	118° 6	114° 4	107° 4	103° 2	101° 4	101° 2	106° 8	108° 8
	7	114° 4	117° 4	118° 8	117° 0	113° 1	107° 4	102° 0	102° 4	102° 8	105° 9	107° 9
	8	120° 6	119° 4	121° 4	119° 5	116° 4	107° 5	100° 9	99° 6	97° 9	98° 0	98° 3
	9	116° 2	120° 4	121° 9	117° 4	124° 2	115° 4	109° 2	105° 5	103° 9	105° 4	106° 7
	10	—	—	—	—	—	—	—	—	—	—	—
	11	115° 0	118° 4	119° 8	118° 4	114° 5	108° 4	102° 2	100° 7	100° 4	105° 2	106° 4
	12	117° 1	118° 6	122° 4	121° 4	114° 6	108° 4	102° 8	103° 4	103° 4	103° 3	106° 7
	13	112° 5	119° 4	64° 4	101° 0	104° 4	87° 9	100° 6	104° 6	99° 4	103° 8	104° 4
	14	115° 2	118° 2	118° 2	111° 9	112° 4	108° 9	100° 4	100° 5	102° 6	106° 9	109° 3
	15	111° 5	112° 9	108° 8	114° 1	114° 2	106° 6	101° 9	103° 9	106° 4	107° 7	110° 4
	16	112° 4	112° 0	118° 2	114° 4	110° 0	104° 6	104° 3	103° 4	104° 8	107° 4	108° 2
	17	—	—	—	—	—	—	—	—	—	—	—
	18	122° 5	117° 6	111° 4	107° 0	101° 6	105° 8	108° 4	104° 5	105° 4	107° 9	110° 5
	19	113° 8	109° 8	111° 6	115° 5	106° 6	111° 2	103° 4	102° 6	105° 8	106° 5	109° 3
	20	113° 6	116° 3	119° 4	119° 4	115° 4	110° 4	106° 4	107° 1	107° 6	108° 2	109° 4
	21	114° 6	116° 4	118° 0	119° 4	117° 6	113° 4	108° 2	107° 4	107° 9	109° 4	109° 4
	22	110° 4	112° 6	114° 3	113° 5	115° 6	109° 3	106° 4	106° 6	108° 2	103° 8	98° 4
	23	137° 5	57° 2	142° 6	118° 3	128° 3	125° 3	119° 4	105° 9	103° 6	109° 7	107° 4
	24	—	—	—	—	—	—	—	—	—	—	—
	25 ^a	110° 1	110° 3	95° 2	107° 3	114° 9	98° 4	101° 4	119° 4	111° 0	108° 0	109° 4
	26	113° 5	117° 2	118° 6	119° 2	115° 4	106° 0	103° 4	104° 2	105° 4	108° 4	110° 0
	27	113° 8	116° 8	121° 4	121° 6	119° 5	114° 3	109° 6	106° 4	106° 4	105° 4	106° 4
	28	113° 6	116° 4	120° 4	119° 7	116° 5	110° 8	105° 4	101° 8	103° 6	104° 6	107° 2
	29	102° 2	120° 4	122° 9	124° 8	122° 2	125° 6	106° 4	106° 4	102° 2	102° 4	105° 1
	30	112° 4	117° 4	119° 3	120° 3	116° 3	111° 7	106° 9	104° 4	105° 0	106° 6	108° 2
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		114° 12	116° 70	118° 08	117° 59	114° 36	110° 28	105° 29	103° 90	104° 25	105° 79	107° 30

^a Observations omitted, having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's Anemometer.

DECLINATION.
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
108° 9	109° 0	106° 9	106° 5	109° 4	109° 4	110° 7	111° 6	112° 4	116° 4	116° 8	116° 4	112° 71
115° 4	118° 5	123° 4	115° 8	115° 4	110° 4	111° 0	112° 2	112° 4	112° 6	113° 8	113° 8	111° 89
110° 2	110° 4	128° 5	107° 3	109° 7	104° 9	111° 4	112° 0	111° 0	111° 0	113° 6	114° 5	111° 77
111° 4	110° 8	112° 0	120° 4	118° 8	114° 3	118° 0	112° 4	111° 4	112° 4	112° 0	113° 6	111° 25
112° 0	110° 2	111° 8	111° 8	110° 6	112° 3	111° 9	111° 5	112° 4	109° 3	113° 2	115° 2	110° 11
108° 4	108° 9	110° 6	110° 4	110° 6	110° 4	110° 4	110° 8	111° 4	111° 8	112° 0	114° 4	107° 32
107° 6	109° 2	110° 9	108° 8	114° 4	108° 6	106° 6	111° 3	111° 2	113° 3	113° 5	113° 7	110° 54
112° 0	110° 5	109° 2	117° 1	111° 2	109° 9	110° 4	110° 0	111° 2	109° 1	110° 4	111° 5	112° 63
111° 5	110° 6	116° 5	117° 2	112° 6	113° 0	110° 2	115° 9	119° 0	123° 4	108° 2	127° 8	109° 23
112° 0	110° 4	120° 4	111° 0 ^b	111° 0	120° 0	118° 6	113° 7	112° 6	114° 4	115° 2	116° 4	110° 06
108° 9	109° 2	108° 9	109° 6	111° 4	110° 7	111° 5	112° 4	112° 4	113° 8	113° 0	115° 0	110° 91
109° 4	110° 4	109° 5	112° 6	115° 8	110° 4	111° 2	111° 0	111° 5	113° 4	114° 3	115° 0	112° 43
107° 8	107° 8	107° 4	107° 4	107° 6	111° 6	116° 9	113° 8	109° 0	111° 8	111° 9	117° 9	111° 55
110° 0	110° 3	111° 0	111° 2	111° 2	111° 2	114° 2	120° 4	117° 4	120° 4	113° 0	115° 2	111° 87
113° 4	109° 4	109° 4	109° 8	110° 6	110° 4	108° 5	117° 2	113° 4	116° 2	112° 6	116° 6	112° 07
108° 0	107° 6	108° 9	109° 5	112° 4	120° 4	107° 5	120° 6	108° 4	116° 5	116° 6	115° 4	109° 42
110° 6	109° 4	109° 0	108° 4	108° 4	106° 2	105° 0	109° 4	112° 4	112° 0	112° 6	112° 2	111° 46
112° 8	112° 4	111° 4	110° 6	109° 4	110° 1	114° 6	120° 0	112° 0	117° 0	111° 0	116° 4	110° 07
111° 6	113° 3	110° 4	108° 4	108° 9	109° 0	122° 0	115° 4	120° 3	110° 0	110° 0	110° 0	95° 87
119° 0	110° 0	118° 0	115° 6	110° 9	105° 6	100° 4	107° 4	101° 4	109° 5	112° 4	112° 0	108° 37
110° 4	108° 3	107° 9	109° 4	109° 0	107° 5	118° 8	130° 4	109° 4	107° 5	107° 2	98° 6	99° 53
109° 7	110° 4	109° 0	107° 8	107° 4	109° 5	111° 4	111° 2	110° 8	110° 6	111° 8	112° 0	109° 48
134° 0	124° 4	105° 4	112° 9	111° 3	109° 4	103° 3	109° 2	110° 0	106° 5	107° 0	109° 8	113° 67
121° 5	107° 5	131° 9	114° 2	120° 0	118° 9	114° 0	120° 4	105° 4	110° 6	109° 9	110° 0	110° 81
108° 4	108° 2	108° 5	108° 6	110° 0	110° 4	110° 4	110° 5	110° 3	113° 4	112° 3	115° 4	110° 91
112° 10	110° 65	112° 86	112° 07	112° 74	111° 36	112° 11	114° 57	112° 48	113° 68	113° 47	113° 75	108° 56
107° 0	107° 7	109° 3	109° 9	110° 5	113° 0	110° 9	112° 2	111° 8	114° 6	112° 8	112° 2	111° 57
107° 4	109° 2	109° 4	109° 8	110° 4	110° 2	111° 5	112° 4	112° 5	113° 5	112° 6	113° 0	110° 31
108° 2	109° 4	109° 6	110° 0	110° 2	111° 2	111° 2	112° 0	112° 0	114° 9	113° 8	113° 4	110° 99
101° 2	107° 0	108° 4	108° 3	109° 4	109° 7	109° 6	110° 3	111° 4	111° 4	112° 0	112° 4	108° 88
109° 2	109° 5	110° 0	109° 2	109° 6	109° 7	110° 4	110° 5	110° 4	110° 4	113° 7	112° 4	110° 26
108° 6	108° 9	109° 4	109° 4	109° 6	110° 4	112° 4	113° 4	119° 5	125° 2	125° 2	117° 5	111° 95
93° 2	103° 0	109° 6	109° 2	110° 4	109° 8	95° 5	111° 8	117° 2	113° 8	113° 6	113° 6	108° 40
105° 4	106° 7	106° 7	115° 5	111° 7	110° 4	111° 0	115° 2	113° 0	113° 8	111° 0	113° 9	112° 05
109° 2	108° 4	111° 5	110° 4	110° 0	110° 0	112° 2	111° 9	107° 4	115° 0	115° 6	117° 3	110° 75
107° 5	108° 8	109° 0	107° 9	113° 4	110° 6	114° 4	116° 2	110° 2	116° 4	129° 0	119° 4	112° 15
104° 9	110° 6	109° 9	110° 4	110° 2	110° 6	110° 4	110° 4	111° 8	111° 4	112° 5	113° 4	105° 60
108° 9	109° 6	109° 0	113° 4	110° 2	110° 6	114° 6	116° 5	115° 7	117° 4	112° 2	112° 4	111° 12
122° 6	112° 9	110° 8	110° 5	111° 6	113° 9	111° 0	115° 4	112° 8	120° 4	114° 6	112° 0	111° 58
108° 6	112° 4	114° 4	115° 0	114° 8	114° 8	119° 4	123° 8	121° 2	117° 4	126° 0	118° 7	113° 10
116° 4	109° 0	110° 2	111° 4	111° 4	110° 9	111° 4	114° 2	112° 4	112° 2	113° 3	113° 5	111° 12
107° 4	109° 6	110° 4	113° 7	120° 9	111° 4	114° 4	112° 5	111° 0	115° 2	112° 2	112° 3	110° 65
112° 0	107° 4	110° 4	108° 4	108° 4	109° 7	112° 5	107° 3	111° 9	111° 8	111° 6	115° 0	111° 50
110° 4	110° 4	110° 4	110° 4	109° 7	115° 6	111° 5	111° 6	112° 6	112° 8	112° 8	112° 6	111° 82
106° 2	109° 6	113° 7	113° 8	114° 0	113° 7	115° 4	115° 4	115° 5	87° 0	87° 0	142° 3	112° 85
120° 4	112° 4	115° 9	106° 4	105° 9	79° 0	112° 1	112° 1	116° 2	112° 6	78° 3	125° 8	111° 43
109° 4	110° 4	119° 4	111° 4	107° 4	107° 6	109° 5	110° 5	109° 4	112° 2	113° 5	112° 6	109° 25
110° 6	112° 4	109° 8	110° 2	110° 4	113° 5	111° 2	119° 8	110° 0	111° 6	112° 4	112° 8	111° 06
108° 2	107° 4	109° 6	110° 4	110° 5	108° 8	110° 9	111° 2	113° 2	110° 2	110° 8	118° 2	111° 58
107° 7	108° 6	108° 8	109° 4	109° 4	107° 5	108° 0	109° 3	109° 5	110° 0	111° 0	115° 8	110° 17
108° 8	108° 8	111° 0	111° 6	110° 5	110° 3	109° 7	110° 2	110° 4	110° 2	111° 2	112° 6	111° 42
109° 0	110° 3	110° 3	111° 4	115° 6	113° 2	115° 4	113° 5	111° 6	110° 5	112° 4	122° 8	112° 20
108° 52	108° 94	110° 00	110° 70	111° 30	110° 89	111° 32	113° 10	112° 61	114° 03	114° 81	114° 72	111° 12

* Fifteen minutes late.

* Three minutes late.

Omitted in the Means, on account of disturbance.

Declinometer.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
NOVEMBER.	1	115° 6'	118° 9'	115° 8'	90° 4'	97° 4'	109° 3'	106° 4'	104° 9'	106° 6'	106° 7'	102° 8'
	2	118° 2'	118° 2'	117° 4'	116° 9'	113° 2'	111° 5'	108° 3'	107° 0'	106° 4'	107° 2'	107° 6'
	3	109° 3'	109° 0'	108° 4'	113° 6'	114° 4'	108° 2'	106° 2'	104° 4'	103° 8'	104° 6'	106° 4'
	4	111° 5'	116° 3'	117° 5'	116° 4'	112° 8'	109° 2'	104° 8'	103° 5'	104° 6'	103° 4'	107° 0'
	5	117° 8'	108° 8'	112° 4'	116° 4'	114° 1'	110° 4'	105° 5'	104° 4'	106° 4'	108° 4'	108° 4'
	6	117° 5'	117° 4'	118° 4'	119° 3'	114° 0'	108° 5'	105° 0'	104° 1'	103° 0'	104° 6'	106° 5'
	7	—	—	—	—	—	—	—	—	—	—	—
	8	118° 0'	109° 0'	110° 4'	111° 6'	103° 4'	108° 6'	104° 2'	101° 5'	102° 2'	103° 4'	104° 4'
	9	115° 2'	114° 2'	113° 6'	113° 0'	114° 9'	110° 4'	106° 5'	103° 8'	103° 4'	103° 8'	104° 4'
	10	111° 6'	112° 2'	122° 4'	118° 5'	111° 2'	105° 6'	99° 4'	98° 9'	100° 1'	103° 3'	103° 4'
	11	113° 7'	115° 4'	119° 6'	121° 1'	118° 6'	113° 3'	108° 0'	105° 6'	105° 0'	106° 4'	107° 5'
	12	111° 7'	117° 4'	121° 4'	122° 8'	121° 8'	115° 4'	110° 0'	107° 2'	104° 2'	106° 8'	108° 4'
	13	114° 4'	112° 2'	121° 8'	121° 9'	116° 1'	111° 9'	105° 2'	104° 4'	104° 8'	105° 0'	106° 2'
	14	—	—	—	—	—	—	—	—	—	—	—
	15	112° 5'	114° 2'	116° 6'	116° 4'	115° 4'	110° 4'	107° 5'	105° 4'	104° 4'	105° 4'	107° 7'
	16	108° 6'	116° 2'	116° 4'	120° 0'	110° 8'	111° 4'	106° 2'	97° 8'	100° 0'	104° 3'	102° 4'
	17	112° 8'	115° 2'	116° 4'	113° 3'	112° 2'	109° 6'	107° 4'	103° 0'	106° 6'	107° 4'	107° 4'
	18	114° 3'	115° 5'	115° 2'	111° 4'	113° 8'	109° 4'	106° 5'	106° 6'	107° 4'	108° 4'	107° 2'
	19	114° 8'	115° 4'	117° 6'	113° 2'	114° 8'	109° 0'	105° 8'	105° 2'	106° 4'	104° 4'	120° 4'
	20	117° 4'	84° 8'	105° 0'	122° 8'	118° 0'	111° 4'	104° 4'	103° 6'	103° 4'	105° 4'	106° 4'
	21	—	—	—	—	—	—	—	—	—	—	—
	22	114° 2'	115° 4'	118° 2'	116° 4'	116° 6'	115° 4'	117° 4'	101° 2'	94° 0'	118° 4'	94° 0'
	23	111° 6'	113° 4'	116° 4'	116° 0'	111° 6'	110° 5'	104° 1'	104° 8'	107° 0'	107° 4'	107° 4'
	24	111° 6'	111° 6'	112° 4'	112° 8'	110° 8'	107° 4'	102° 5'	102° 4'	104° 0'	104° 4'	107° 4'
	25	110° 2'	110° 4'	122° 4'	117° 3'	116° 4'	118° 5'	105° 9'	108° 4'	100° 6'	96° 2'	100° 4'
	26	107° 5'	108° 6'	102° 5'	110° 6'	113° 4'	111° 6'	110° 9'	109° 4'	106° 8'	105° 8'	106° 9'
	27	110° 2'	113° 4'	114° 8'	108° 5'	113° 0'	113° 1'	109° 6'	105° 2'	107° 4'	107° 4'	105° 4'
	28	—	—	—	—	—	—	—	—	—	—	—
	29	113° 4'	114° 2'	115° 4'	116° 1'	116° 5'	113° 0'	108° 8'	114° 3'	105° 0'	106° 4'	108° 4'
	30	113° 5'	114° 3'	115° 5'	115° 4'	115° 4'	114° 4'	110° 5'	107° 4'	107° 0'	107° 4'	107° 8'
Hourly Means		113° 40'	113° 96'	115° 58'	114° 59'	113° 03'	110° 53'	106° 49'	101° 83'	104° 89'	105° 84'	107° 02'
DECEMBER.	1	115° 0'	115° 5'	115° 4'	115° 6'	116° 6'	115° 6'	112° 5'	116° 2'	116° 9'	108° 6'	110° 4'
	2	114° 6'	113° 0'	114° 4'	113° 6'	114° 2'	111° 3'	111° 9'	107° 4'	107° 0'	105° 2'	105° 2'
	3	108° 4'	108° 2'	114° 9'	117° 4'	107° 0'	106° 6'	107° 6'	105° 4'	105° 8'	106° 3'	106° 7'
	4	114° 8'	112° 5'	109° 7'	102° 5'	109° 8'	107° 4'	107° 3'	105° 4'	106° 4'	107° 0'	107° 4'
	5	—	—	—	—	—	—	—	—	—	—	—
	6	113° 3'	113° 3'	114° 2'	115° 4'	114° 4'	112° 5'	110° 3'	110° 4'	110° 6'	109° 4'	109° 0'
	7	113° 7'	114° 0'	114° 4'	113° 9'	114° 3'	110° 3'	107° 5'	106° 4'	106° 2'	105° 9'	107° 4'
	8	110° 4'	112° 0'	107° 2'	116° 6'	103° 5'	106° 0'	102° 4'	105° 8'	106° 0'	107° 8'	109° 2'
	9	107° 4'	117° 4'	112° 4'	105° 4'	107° 4'	104° 8'	103° 4'	105° 5'	100° 7'	108° 3'	107° 6'
	10	116° 4'	112° 6'	114° 6'	111° 4'	108° 6'	106° 5'	102° 2'	102° 4'	101° 4'	102° 4'	116° 4'
	11	98° 3'	98° 9'	100° 9'	109° 6'	113° 1'	113° 4'	109° 3'	108° 4'	108° 0'	107° 9'	105° 4'
	12	—	—	—	—	—	—	—	—	—	—	—
	13	112° 5'	113° 5'	114° 6'	113° 6'	112° 6'	110° 8'	109° 0'	105° 0'	105° 2'	105° 6'	109° 2'
	14	106° 6'	110° 2'	103° 4'	117° 4'	119° 4'	116° 5'	110° 4'	106° 2'	106° 0'	106° 2'	108° 8'
	15	112° 5'	114° 3'	115° 4'	118° 2'	116° 4'	116° 6'	110° 2'	107° 6'	106° 6'	107° 4'	108° 0'
	16	112° 8'	113° 4'	113° 8'	117° 2'	118° 7'	117° 0'	112° 6'	109° 4'	108° 9'	107° 4'	106° 5'
	17	115° 4'	114° 4'	118° 3'	130° 4'	139° 4'	104° 6'	119° 6'	106° 0'	89° 5'	97° 8'	109° 4'
	18	104° 5'	112° 4'	98° 4'	116° 9'	104° 5'	108° 4'	109° 6'	108° 2'	101° 6'	111° 4'	108° 4'
	19	—	—	—	—	—	—	—	—	—	—	—
	20	7° 8'	10° 0'	117° 8'	45° 7'	84° 0'	116° 4'	115° 5'	100° 3'	107° 3'	121° 5'	109° 4'
	21	112° 4'	116° 4'	116° 7'	118° 8'	119° 4'	113° 4'	110° 6'	107° 0'	106° 6'	106° 5'	106° 4'
	22	110° 4'	111° 6'	112° 8'	102° 9'	108° 6'	110° 7'	107° 6'	106° 4'	107° 4'	107° 9'	106° 9'
	23	110° 9'	111° 0'	111° 0'	113° 6'	111° 5'	111° 6'	109° 4'	107° 5'	107° 2'	104° 6'	106° 5'
	24	108° 4'	113° 4'	116° 5'	116° 5'	116° 2'	111° 5'	109° 2'	106° 5'	104° 4'	107° 0'	109° 4'
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	113° 4'	115° 4'	118° 6'	118° 2'	117° 2'	111° 6'	108° 4'	106° 4'	107° 5'	109° 2'	109° 6'
	28	112° 4'	113° 5'	114° 8'	116° 2'	117° 6'	113° 4'	110° 4'	106° 4'	108° 0'	108° 0'	107° 5'
	29	111° 8'	115° 4'	115° 5'	119° 5'	118° 5'	109° 9'	107° 3'	109° 3'	99° 9'	105° 8'	105° 9'
	30	112° 5'	113° 0'	113° 8'	116° 2'	116° 9'	114° 5'	111° 4'	110° 4'	107° 3'	106° 9'	106° 3'
	31	113° 3'	113° 3'	114° 6'	117° 2'	117° 6'	114° 5'	113° 0'	111° 2'	110° 4'	110° 2'	108° 2'
Hourly Means		111° 57'	112° 76'	113° 25'	114° 97'	114° 95'	111° 29'	109° 31'	107° 44'	106° 00'	106° 68'	107° 99'

* Thirteen minutes late.

b Two minutes late.

c Omitted in the Means, on account of disturbance.

DECLINATION.
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
92° 8	93° 6	107° 6	103° 4	117° 1	115° 4	108° 4	120° 6	114° 4	118° 2	118° 0	115° 8	114° 6	112° 8	109° 78
97° 6	108° 4	109° 6	109° 4	109° 8	109° 5	108° 4	115° 1	108° 5	102° 4	116° 6	112° 4	117° 8	109° 6	111° 23
96° 4	108° 2	108° 3	108° 5	110° 8	114° 3	114° 4	111° 5	112° 0	98° 4	114° 8	117° 2	112° 4	112° 4	109° 63
97° 0	108° 8	110° 0	110° 4	110° 2	109° 9	110° 4	119° 5	114° 0	111° 4	120° 6	111° 3	113° 4	114° 0	110° 95
98° 4	108° 4	110° 4	111° 2	111° 3	110° 7	111° 5	111° 3	116° 9	112° 4	118° 2	120° 8	118° 4	121° 4	112° 33
96° 5	108° 2	109° 2	110° 4	110° 6	110° 2	111° 2	114° 4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	115° 2	114° 3	111° 4	110° 3	115° 6	117° 8	111° 55
94° 4	108° 2	109° 3	109° 6	109° 2	112° 4	111° 4	111° 5	102° 5	112° 4	112° 0	110° 4	111° 0	111° 3	108° 66
94° 4	107° 6	107° 6	110° 2	112° 4	122° 8	117° 6	113° 4	113° 8	111° 4	112° 6	113° 4	115° 4	112° 6	111° 42
93° 4	104° 2	112° 4	113° 0	112° 8	119° 4	115° 9	120° 6	107° 4	109° 7	111° 0	114° 3	112° 4	111° 8	110° 48
97° 5	108° 7	109° 4	109° 8	114° 6	113° 4	113° 4	118° 8	112° 4	109° 2	109° 4	109° 4	111° 2	110° 0	111° 83
98° 4	110° 2	109° 6	111° 0	116° 4	111° 6	117° 4	113° 4	112° 2	110° 6	112° 3	114° 4	107° 8	108° 7	112° 61
96° 2	107° 8	110° 6	111° 2	112° 8	113° 3	112° 5	112° 4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	111° 9	112° 0	114° 7	114° 9	115° 0	115° 4	112° 03
97° 7	110° 3	109° 6	110° 5	109° 6	119° 5	115° 4	110° 4	111° 0	118° 0	111° 0	112° 6	112° 6	104° 4	111° 30
92° 4	100° 9	105° 4	106° 0	111° 6	111° 4	115° 4	117° 2	111° 2	112° 4	112° 4	115° 4	114° 6	113° 4	110° 06
97° 4	109° 2	110° 4	110° 3	111° 3	113° 4	112° 4	113° 4	111° 5	111° 0	111° 6	112° 0	105° 8	112° 3	110° 66
97° 2	107° 4	113° 0	110° 4	111° 4	110° 0	110° 4	110° 4	110° 4	110° 2	111° 6	111° 6	106° 4	109° 6	110° 35
92° 4	98° 4	102° 2	110° 8	112° 4	111° 7	116° 8	117° 2	114° 0	110° 2	110° 3	109° 4	109° 9	113° 4	110° 99
96° 4	107° 4	108° 4	106° 4	112° 6	111° 8	112° 0	111° 8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	107° 4	106° 4	106° 4	110° 9	111° 6	114° 4	108° 75
94° 0	98° 2	104° 4	124° 0	109° 0	123° 2	123° 0	115° 0	119° 4	103° 0	102° 6	104° 0	109° 8	109° 8	111° 11
97° 4	107° 6	109° 2	110° 2	110° 4	109° 2	108° 4	108° 4	108° 6	108° 0	107° 4	109° 4	111° 4	111° 1	109° 56
97° 4	110° 4	114° 2	112° 4	113° 4	113° 4	144° 2	118° 4	109° 2	100° 2	107° 7	112° 4	110° 7	110° 8	111° 03
90° 4	100° 8	112° 6	113° 3	99° 4	182° 6	119° 3	125° 0	121° 3	122° 6	121° 4	118° 0	113° 2	110° 2	115° 18
96° 9	103° 8	116° 0	116° 6	111° 6	106° 0	115° 2	111° 6	111° 4	110° 4	109° 2	104° 3	104° 4	111° 4	109° 41
95° 4	112° 5	114° 4	112° 0	112° 2	111° 6	112° 6	113° 4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	114° 2	112° 6	111° 4	113° 3	112° 5	112° 4	111° 50
98° 4	109° 9	110° 4	110° 6	111° 6	112° 9	111° 6	112° 6	112° 6	112° 4	112° 8	113° 4	113° 4	114° 3	112° 08
97° 8	109° 9	110° 7	110° 7	113° 2	111° 8	112° 8	111° 6	111° 8	112° 3	112° 6	112° 9	120° 8	120° 4	112° 50
—	—	109° 98	110° 37	112° 03	112° 78	114° 25	114° 22	111° 61	110° 44	112° 17	112° 67	112° 50	112° 67	110° 95
—	—	109° 2	110° 6	112° 8	111° 4	111° 7	115° 2	111° 6	112° 2	111° 2	111° 0	121° 4	116° 4	113° 45
95° 2	111° 4	102° 4	104° 5	111° 4	115° 8	114° 0	121° 2	118° 4	118° 3	103° 0	115° 2	112° 4	114° 2	111° 67
96° 7	107° 8	108° 4	113° 8	112° 0	109° 6	114° 9	111° 3	113° 0	112° 4	113° 2	113° 2	112° 8	113° 0	110° 43
97° 4	109° 0	111° 2	112° 2	115° 4	114° 4	115° 9	113° 4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	109° 4	115° 4	116° 2	113° 8	113° 4	113° 5	110° 97
99° 0	110° 0	110° 6	110° 6	111° 4	111° 6	112° 8	113° 0	113° 0	112° 3	112° 0	112° 5	113° 0	112° 8	112° 02
95° 9	107° 4	109° 4	108° 5	106° 2	107° 4	109° 6	111° 4	107° 4	112° 0	115° 0	114° 8	119° 5	121° 4	110° 94
99° 2	110° 4	111° 9	109° 4	108° 5	114° 9	115° 1	112° 2	113° 0	114° 5	113° 9	114° 6	111° 0	112° 6	110° 37
97° 6	109° 4	110° 0	111° 4	111° 6	112° 0	111° 4	111° 3	111° 4	112° 4	96° 6	113° 5	114° 8	116° 4	109° 27
16° 4	110° 1	109° 4	114° 2	108° 4	112° 4	122° 2	124° 6	128° 0	119° 4	111° 8	112° 4	107° 5	101° 6	111° 54
95° 4	109° 3	112° 4	113° 4	112° 5	113° 8	113° 2	112° 4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	110° 4	109° 3	111° 6	111° 4	112° 0	111° 8	109° 45
99° 2	109° 8	109° 6	109° 8	111° 0	115° 8	111° 7	111° 4	111° 6	112° 0	109° 4	108° 4	109° 0	112° 2	110° 60
98° 8	109° 8	110° 6	111° 6	112° 4	116° 0	114° 8	112° 9	112° 2	109° 4	111° 3	108° 9	108° 4	111° 5	111° 29
98° 0	110° 0	111° 3	112° 0	112° 4	113° 4	112° 6	112° 6	111° 6	107° 6	111° 4	111° 7	112° 6	112° 6	111° 88
96° 5	110° 2	110° 4	110° 4	110° 8	110° 3	114° 4	114° 4	118° 4	115° 8	115° 6	119° 0	124° 2	117° 5	113° 71
99° 4	102° 5	109° 2	109° 6	112° 4	106° 4	111° 8	111° 4	112° 4	113° 8	111° 4	111° 4	112° 9	113° 4	111° 39
98° 4	111° 0	111° 4	111° 2	123° 2	114° 2	117° 0	121° 9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	106° 0	143° 0	123° 0	120° 0	81° 8	155° 8	100° 51
99° 4	103° 9	120° 2	133° 5	115° 4	118° 7	120° 0	112° 4	114° 8	122° 4	113° 4	114° 0	114° 4	113° 4	102° 30
96° 4	107° 7	109° 8	111° 4	111° 2	111° 6	111° 6	111° 3	114° 6	108° 6	109° 6	110° 8	113° 5	107° 8	111° 40
96° 9	106° 6	134° 2	107° 6	110° 5	113° 5	114° 0	114° 4	121° 6	105° 6	116° 4	111° 0	115° 4	110° 4	111° 43
96° 5	108° 4	109° 5	109° 9	112° 5	113° 4	112° 2	113° 4	112° 6	114° 7	116° 4	113° 4	116° 2	115° 4	111° 45
99° 4	110° 6	109° 8	112° 4	114° 5	114° 4	113° 4	112° 5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	113° 4	112° 3	112° 4	112° 5	112° 5	113° 6	111° 80
99° 6	110° 5	111° 0	110° 9	111° 0	113° 4	112° 6	114° 2	110° 6	111° 5	112° 0	112° 6	112° 9	112° 4	112° 13
97° 5	108° 8	109° 4	110° 9	112° 2	112° 8	112° 4	111° 5	112° 4	112° 4	112° 4	111° 6	112° 8	113° 3	111° 71
95° 9	107° 6	108° 4	111° 5	122° 4	111° 0	112° 4	113° 6	112° 2	110° 5	112° 2	113° 3	111° 6	112° 0	111° 56
96° 3	107° 2	108° 0	112° 4	110° 2	112° 4	112° 5	114° 4	110° 4	111° 8	113° 4	113° 6	114° 0	112° 3	111° 74
98° 2	108° 8	109° 7	110° 7	111° 3	111° 8	109° 3	110° 4	110° 4	112° 3	112° 4	111° 5	112° 4	112° 4	111° 95
—	—	110° 64	110° 82	111° 87	112° 52	113° 19	113° 52	113° 33	112° 35	111° 70	112° 59	113° 59	112° 94	111° 42

* Two minutes late.

* Christmas Day.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0°.721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .	
JANUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
	1	113° 4'	113° 5'	116° 8'	116° 2'	114° 2'	110° 2'	111° 2'	110° 8'	110° 0'	108° 7'	107° 7'	108° 0'
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	112° 8'	112° 6'	116° 2'	119° 4'	119° 4'	116° 5'	113° 2'	111° 3'	106° 9'	99° 4'	97° 4'	105° 6'
	4	108° 3'	106° 8'	111° 6'	114° 5'	107° 4'	107° 5'	112° 4'	110° 6'	107° 7'	106° 4'	109° 7'	109° 8'
	5	113° 9'	114° 5'	116° 9'	118° 6'	118° 6'	114° 9'	110° 9'	109° 2'	108° 6'	108° 4'	107° 6'	110° 4'
	6	114° 1'	115° 0'	116° 4'	120° 0'	120° 2'	116° 4'	110° 3'	109° 0'	108° 8'	109° 2'	109° 2'	110° 8'
	7	113° 4'	110° 4'	106° 6'	114° 4'	112° 0'	110° 2'	109° 0'	107° 8'	107° 4'	106° 7'	108° 4'	111° 0'
	8	113° 4'	115° 8'	119° 2'	120° 0'	117° 2'	113° 3'	107° 4'	105° 9'	104° 4'	114° 0'	106° 4'	108° 6'
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	113° 6'	110° 9'	116° 5'	128° 8'	116° 4'	112° 1'	109° 9'	107° 4'	104° 9'	105° 4'	107° 9'	110° 4'
	11	112° 9'	116° 0'	118° 8'	121° 6'	116° 6'	112° 4'	107° 5'	104° 2'	100° 6'	104° 1'	107° 0'	108° 2'
	12	116° 4'	108° 4'	124° 4'	125° 0'	113° 2'	113° 4'	89° 4'	106° 5'	112° 4'	96° 6'	109° 2'	100° 7'
	13	111° 7'	109° 8'	101° 9'	105° 4'	113° 2'	113° 4'	111° 6'	105° 4'	99° 6'	107° 7'	100° 2'	107° 4'
	14	113° 4'	112° 5'	117° 4'	120° 4'	116° 4'	118° 7'	105° 1'	100° 9'	97° 0'	95° 0'	102° 0'	108° 7'
	15	113° 4'	114° 2'	111° 2'	112° 0'	112° 2'	111° 8'	106° 7'	106° 6'	106° 0'	107° 6'	108° 8'	108° 4'
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	113° 0'	114° 4'	114° 4'	114° 4'	111° 6'	110° 4'	107° 8'	106° 4'	106° 5'	107° 5'	107° 3'	108° 4'
	18	111° 6'	114° 4'	116° 6'	117° 4'	117° 6'	111° 9'	110° 6'	106° 2'	106° 4'	105° 8'	105° 6'	108° 5'
	19	113° 4'	112° 4'	113° 6'	131° 6'	121° 0'	111° 8'	106° 2'	104° 9'	103° 0'	105° 4'	106° 8'	107° 5'
	20	112° 5'	112° 4'	118° 2'	118° 3'	117° 6'	110° 6'	111° 0'	107° 6'	103° 8'	103° 2'	106° 4'	108° 5'
	21	112° 3'	113° 9'	114° 5'	118° 2'	116° 1'	112° 7'	109° 5'	105° 9'	101° 8'	105° 9'	107° 6'	103° 4'
	22	113° 5'	113° 4'	118° 4'	116° 8'	117° 4'	111° 9'	108° 6'	105° 3'	105° 5'	108° 4'	107° 1'	106° 4'
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	106° 9'	120° 4'	115° 3'	103° 7'	104° 4'	101° 6'	105° 4'	99° 8'	95° 0'	101° 2'	101° 8'	100° 0'
	25	114° 5'	110° 0'	118° 4'	115° 4'	112° 2'	107° 4'	101° 9'	97° 4'	95° 4'	99° 4'	103° 8'	104° 6'
	26	112° 0'	118° 4'	123° 2'	122° 7'	108° 8'	108° 8'	103° 4'	101° 4'	105° 3'	109° 4'	102° 8'	105° 4'
	27	115° 8'	112° 5'	122° 4'	120° 3'	119° 2'	114° 0'	104° 6'	104° 2'	103° 8'	105° 6'	106° 2'	106° 7'
	28	112° 8'	115° 4'	115° 9'	119° 0'	118° 6'	126° 0'	105° 0'	104° 5'	104° 2'	106° 5'	105° 2'	104° 2'
	29	116° 6'	115° 0'	119° 0'	115° 9'	118° 4'	113° 8'	108° 5'	106° 2'	107° 4'	107° 4'	107° 8'	109° 0'
	30	—	—	—	—	—	—	—	—	—	—	—	—
31	110° 5'	111° 5'	115° 7'	117° 2'	117° 2'	114° 8'	110° 8'	108° 2'	107° 9'	107° 0'	105° 6'	105° 9'	
Hourly Means	112° 93'	113° 25'	116° 13'	117° 97'	115° 27'	112° 75'	107° 61'	105° 91'	104° 63'	105° 46'	105° 98'	107° 17'	
FEBRUARY.	1	117° 5'	118° 1'	120° 1'	124° 2'	121° 7'	122° 3'	118° 4'	115° 5'	113° 7'	112° 2'	111° 5'	114° 4'
	2	122° 6'	111° 6'	119° 5'	122° 6'	122° 5'	120° 9'	118° 2'	113° 4'	111° 6'	112° 3'	113° 3'	114° 4'
	3	115° 9'	120° 6'	121° 4'	123° 4'	122° 8'	119° 6'	116° 4'	114° 5'	113° 3'	112° 6'	112° 4'	113° 4'
	4	118° 4'	117° 2'	120° 3'	124° 4'	122° 6'	118° 4'	115° 4'	113° 8'	111° 2'	110° 6'	110° 4'	112° 2'
	5	117° 6'	118° 6'	123° 2'	126° 0'	120° 8'	118° 6'	116° 4'	115° 1'	114° 3'	114° 1'	114° 2'	115° 4'
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	120° 8'	121° 4'	123° 0'	126° 6'	122° 2'	118° 2'	114° 4'	113° 9'	109° 5'	106° 4'	109° 6'	105° 6'
	8	118° 6'	118° 7'	123° 8'	122° 0'	122° 3'	118° 0'	106° 4'	107° 2'	109° 3'	110° 0'	112° 9'	110° 4'
	9	124° 2'	121° 0'	124° 2'	133° 0'	123° 8'	116° 6'	115° 4'	108° 8'	107° 4'	108° 5'	104° 4'	110° 4'
	10	117° 6'	120° 0'	124° 7'	126° 2'	127° 4'	122° 4'	117° 6'	115° 8'	111° 4'	110° 2'	111° 8'	109° 4'
	11	118° 5'	115° 7'	122° 8'	128° 2'	127° 2'	122° 0'	116° 4'	111° 4'	109° 3'	109° 4'	109° 3'	110° 4'
	12	118° 8'	119° 0'	116° 2'	117° 2'	120° 2'	121° 4'	119° 7'	117° 4'	114° 4'	112° 4'	113° 1'	112° 6'
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	118° 4'	119° 0'	121° 5'	123° 7'	124° 6'	121° 3'	119° 2'	116° 6'	115° 0'	111° 6'	106° 0'	93° 4'
	15	121° 4'	119° 2'	110° 4'	118° 4'	120° 0'	118° 0'	110° 0'	107° 5'	107° 7'	110° 6'	113° 5'	110° 4'
	16	119° 4'	120° 4'	123° 0'	123° 8'	122° 6'	117° 4'	113° 3'	112° 4'	112° 4'	113° 2'	112° 4'	112° 4'
	17	119° 3'	121° 5'	127° 0'	125° 4'	123° 6'	118° 6'	114° 6'	112° 5'	111° 7'	112° 4'	113° 3'	113° 9'
	18	120° 2'	122° 4'	125° 6'	126° 4'	124° 7'	118° 6'	113° 4'	109° 8'	108° 5'	110° 3'	112° 6'	114° 4'
	19	124° 4'	124° 0'	124° 6'	127° 4'	117° 4'	111° 5'	106° 0'	101° 6'	107° 4'	110° 4'	112° 2'	112° 6'
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21 ^a	110° 4'	98° 0'	131° 8'	131° 0'	125° 4'	120° 0'	119° 8'	116° 6'	109° 8'	100° 0'	127° 5'	141° 8'
	22 ^b	121° 4'	128° 3'	125° 4'	126° 4'	123° 6'	120° 6'	116° 2'	108° 8'	101° 6'	89° 0'	103° 8'	105° 9'
	23	122° 4'	119° 4'	123° 6'	124° 2'	121° 6'	118° 8'	122° 5'	121° 4'	112° 0'	108° 3'	107° 2'	109° 8'
	24	104° 2'	109° 5'	105° 8'	119° 5'	110° 7'	114° 3'	113° 0'	114° 7'	109° 5'	111° 4'	125° 4'	113° 4'
	25	119° 6'	104° 3'	106° 4'	116° 7'	125° 6'	124° 4'	115° 7'	115° 2'	114° 0'	114° 2'	112° 4'	117° 3'
	26	118° 5'	119° 0'	122° 3'	125° 4'	126° 4'	121° 8'	120° 0'	115° 4'	114° 0'	111° 2'	112° 3'	112° 4'
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	115° 6'	113° 4'	124° 4'	128° 3'	120° 6'	122° 5'	115° 5'	110° 4'	103° 6'	106° 4'	110° 8'	111° 7'
	29	119° 2'	121° 4'	122° 6'	123° 4'	125° 8'	121° 4'	117° 2'	113° 4'	111° 4'	111° 1'	111° 7'	112° 6'
Hourly Means	118° 83'	118° 06'	120° 71'	124° 28'	122° 48'	119° 57'	115° 44'	112° 94'	110° 98'	110° 86'	111° 86'	111° 43'	

^a Three minutes late.^b Omitted in the Means, on account of disturbance.^c Five minutes late.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
108° 4	109° 4	111° 4	112° 6	110° 8	112° 8	—	—	—	—	—	—	—	—
107° 8	107° 0	115° 4	118° 7	118° 4	119° 4	112° 6	112° 3	112° 4	111° 4	111° 4	112° 8	111° 63	111° 54
110° 6	111° 5	112° 3	112° 4	112° 0	112° 2	111° 2	112° 4	111° 8	109° 4	112° 3	113° 0	113° 85	
110° 8	111° 4	111° 8	113° 2	112° 0	111° 8	110° 7	112° 9	111° 9	111° 9	109° 5	113° 4	112° 24	
111° 6	111° 7	111° 7	112° 4	112° 0	113° 5	112° 8	113° 7	114° 0	116° 7	111° 4	113° 4	113° 10	
111° 2	111° 5	112° 0	115° 4	117° 0	112° 5	110° 6	113° 2	112° 8	113° 2	112° 5	111° 8	111° 29	
108° 8	111° 5	111° 4	111° 4	110° 8	110° 4	—	—	—	—	—	—	111° 33	
—	—	—	—	—	—	112° 2	112° 4	111° 2	114° 6	110° 2	111° 4	—	
110° 6	109° 6	114° 4	111° 2	112° 4	112° 6	112° 8	113° 7	113° 4	113° 4	114° 2	114° 0	112° 35	
109° 6	120° 0	126° 4	120° 4	118° 2	108° 4	113° 5	112° 0	114° 5	117° 5	124° 0	118° 4	113° 87	
113° 2	110° 0	110° 4	108° 0	108° 8	110° 8	111° 0	111° 6	111° 6	113° 4	104° 9	108° 8	109° 92	
108° 2	106° 8	109° 0	114° 3	112° 4	109° 9	108° 6	109° 7	108° 5	110° 2	108° 2	109° 2	108° 51	111° 17
109° 3	117° 6	111° 4	111° 4	109° 9	109° 2	108° 9	109° 2	109° 5	110° 4	109° 6	112° 5	109° 85	
108° 4	108° 4	109° 3	109° 4	109° 4	110° 2	—	—	—	—	—	—	110° 54	
—	—	—	—	—	—	110° 6	113° 5	113° 0	110° 5	110° 4	111° 0	—	
108° 6	107° 4	110° 6	110° 6	110° 8	115° 4	111° 6	112° 2	111° 5	111° 5	112° 2	111° 4	110° 66	
107° 5	109° 2	111° 4	112° 4	113° 0	110° 9	111° 0	111° 9	112° 3	112° 4	113° 6	112° 3	111° 40	
107° 6	109° 7	114° 0	116° 1	113° 3	113° 4	111° 3	112° 6	104° 4	107° 6	117° 4	112° 2	111° 55	
109° 5	110° 9	111° 6	110° 4	111° 7	112° 4	113° 2	112° 4	110° 0	112° 5	112° 2	113° 4	111° 26	
109° 4	108° 7	109° 9	110° 8	110° 8	110° 6	110° 4	111° 2	110° 9	111° 5	111° 6	111° 4	110° 38	
110° 2	107° 6	111° 4	109° 6	115° 2	111° 7	—	—	—	—	—	—	112° 11	
—	—	—	—	—	—	112° 7	112° 8	111° 4	116° 8	115° 0	123° 6	—	116° 12
113° 0	108° 7	110° 3	110° 8	111° 0	112° 8	109° 4	110° 4	111° 4	111° 4	112° 8	112° 6	107° 50	
105° 0	110° 5	111° 2	111° 0	112° 6	111° 6	111° 0	111° 4	114° 2	114° 4	113° 4	111° 8	109° 10	
106° 6	106° 6	112° 4	107° 5	111° 5	115° 4	108° 6	109° 4	108° 4	114° 4	114° 2	113° 9	110° 44	
108° 3	108° 5	110° 3	110° 4	111° 4	115° 4	124° 0	119° 5	117° 4	123° 4	125° 5	110° 1	113° 31	
110° 4	119° 4	136° 5	121° 4	120° 3	118° 8	129° 6	108° 9	110° 2	106° 2	130° 0	128° 4	115° 73	
108° 8	108° 7	109° 2	109° 2	110° 0	110° 2	—	—	—	—	—	—	111° 39	
—	—	—	—	—	—	115° 4	113° 1	109° 2	111° 6	113° 6	109° 4	—	
107° 0	108° 0	108° 8	109° 5	109° 6	110° 4	110° 5	110° 7	110° 5	110° 2	111° 3	112° 4	110° 47	
108° 86	110° 40	112° 87	112° 33	112° 51	112° 41	112° 95	112° 17	111° 53	113° 27	114° 07	113° 27	111° 32	
—	—	—	—	—	—	—	—	—	—	—	—	—	117° 25
114° 6	115° 3	116° 2	116° 4	122° 6	116° 0	120° 5	116° 4	116° 6	118° 8	110° 8	116° 2	117° 08	
115° 4	115° 6	116° 4	116° 4	117° 6	118° 8	116° 4	116° 1	116° 8	117° 8	117° 4	117° 0	116° 86	
115° 5	115° 6	116° 8	120° 6	124° 4	120° 2	120° 3	120° 4	119° 0	119° 0	119° 4	117° 6	118° 13	
113° 3	115° 3	116° 5	116° 0	118° 3	117° 8	117° 0	116° 6	117° 4	116° 6	117° 1	117° 6	116° 43	
117° 0	117° 4	116° 8	119° 8	116° 6	116° 5	—	—	—	—	—	—	120° 08	
—	—	—	—	—	—	140° 0	134° 4	119° 6	130° 6	116° 4	122° 6	—	
108° 9	107° 6	111° 4	117° 2	122° 3	121° 4	117° 5	118° 8	115° 6	116° 4	117° 0	117° 4	115° 96	
111° 5	112° 4	108° 4	123° 8	124° 4	130° 2	129° 4	124° 7	112° 5	115° 7	109° 3	112° 2	116° 42	
110° 2	111° 4	122° 4	113° 3	124° 5	118° 4	117° 9	117° 8	116° 4	116° 6	116° 2	116° 0	116° 58	
111° 4	114° 4	116° 6	116° 4	117° 9	118° 6	118° 0	116° 3	116° 6	116° 4	116° 9	117° 4	117° 14	
112° 0	112° 8	115° 6	116° 5	117° 4	117° 8	118° 4	119° 4	117° 7	119° 2	118° 4	118° 6	116° 85	117° 25
113° 3	114° 4	115° 4	116° 5	120° 6	116° 3	—	—	—	—	—	—	117° 05	
—	—	—	—	—	—	120° 6	118° 2	117° 8	118° 4	117° 6	117° 6	—	
107° 4	112° 2	115° 8	115° 2	115° 0	121° 6	121° 6	122° 1	120° 7	121° 2	113° 4	116° 0	116° 48	
112° 4	113° 0	114° 4	115° 2	116° 3	118° 0	117° 5	117° 2	120° 0	118° 8	122° 4	121° 4	115° 57	
114° 7	116° 3	115° 7	117° 0	117° 2	119° 8	117° 8	113° 4	120° 0	118° 4	119° 6	121° 4	117° 29	
114° 4	115° 0	116° 2	116° 4	116° 6	116° 7	115° 4	116° 3	117° 0	117° 6	118° 4	119° 0	117° 20	
115° 0	115° 4	115° 6	116° 4	116° 2	116° 2	117° 3	123° 6	119° 6	119° 0	120° 6	118° 8	117° 52	
114° 3	114° 4	114° 4	112° 1	112° 4	120° 5	—	—	—	—	—	—	115° 20	
—	—	—	—	—	—	118° 4	124° 2	91° 2	121° 2	123° 9	118° 2	—	
117° 8	106° 8	116° 4	293° 5	128° 9	128° 5	119° 2	120° 0	118° 0	118° 8	116° 4	121° 0	126° 56	117° 25
107° 3	123° 4	116° 8	118° 4	117° 8	128° 4	120° 4	83° 4	97° 6	104° 6	102° 6	107° 4	112° 46	
110° 2	114° 8	116° 5	126° 6	127° 4	141° 8	128° 4	142° 0	126° 0	114° 4	124° 0	104° 2	120° 31	
112° 4	110° 6	116° 4	117° 7	110° 4	116° 1	143° 0	121° 2	112° 4	122° 8	98° 4	130° 5	115° 14	
121° 0	112° 4	115° 4	120° 8	119° 8	116° 5	115° 6	116° 4	115° 8	116° 8	116° 8	117° 4	116° 27	
113° 8	114° 8	116° 2	136° 2	118° 4	118° 4	—	—	—	—	—	—	117° 94	
—	—	—	—	—	—	116° 8	117° 0	113° 4	113° 0	113° 8	120° 0	—	
113° 4	115° 2	116° 3	116° 8	117° 0	116° 6	118° 3	116° 6	113° 6	118° 3	111° 4	120° 0	115° 74	
112° 2	115° 4	114° 8	111° 2	134° 5	130° 4	117° 6	117° 1	117° 4	113° 6	119° 0	119° 2	118° 07	
113° 23	113° 99	115° 66	118° 02	119° 43	120° 20	121° 03	120° 27	116° 22	118° 29	116° 44	118° 10	117° 01	

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
MARCH.	1	119° 6'	121° 4'	124° 4'	125° 8'	120° 7'	119° 7'	114° 5'	115° 4'	112° 4'	114° 3'	113° 0'
	2	119° 7'	121° 8'	124° 3'	126° 5'	125° 4'	123° 4'	118° 5'	113° 4'	112° 2'	111° 8'	112° 4'
	3	118° 4'	121° 6'	124° 4'	125° 0'	121° 3'	118° 6'	111° 4'	108° 6'	108° 4'	110° 2'	112° 6'
	4	118° 3'	120° 8'	126° 2'	126° 5'	122° 4'	115° 4'	109° 6'	107° 4'	107° 6'	109° 6'	110° 8'
	5	—	—	—	—	—	—	—	—	—	—	—
	6	122° 5'	124° 6'	126° 6'	123° 8'	119° 6'	112° 4'	110° 4'	106° 4'	104° 4'	105° 4'	107° 5'
	7	122° 4'	126° 2'	128° 4'	128° 2'	121° 4'	116° 3'	108° 4'	109° 4'	108° 9'	110° 9'	114° 0'
	8	125° 9'	125° 9'	129° 6'	132° 4'	122° 6'	116° 3'	102° 2'	103° 6'	102° 6'	103° 4'	103° 5'
	9	120° 4'	124° 4'	127° 4'	126° 6'	121° 7'	114° 6'	107° 6'	104° 4'	104° 8'	104° 6'	108° 6'
	10	121° 6'	125° 0'	128° 3'	129° 2'	127° 4'	122° 4'	116° 6'	115° 2'	109° 0'	108° 4'	110° 2'
	11	121° 3'	124° 4'	127° 0'	128° 4'	125° 8'	120° 6'	114° 4'	112° 1'	109° 4'	108° 4'	110° 2'
	12	—	—	—	—	—	—	—	—	—	—	—
	13	122° 4'	125° 4'	126° 8'	127° 4'	122° 6'	118° 4'	112° 4'	109° 4'	107° 9'	107° 9'	109° 4'
	14	122° 0'	119° 5'	122° 4'	124° 9'	117° 8'	115° 4'	109° 6'	106° 6'	106° 2'	106° 4'	109° 1'
	15	123° 2'	121° 4'	113° 5'	107° 4'	99° 4'	112° 6'	105° 7'	107° 2'	110° 2'	114° 5'	115° 2'
	16	131° 6'	130° 8'	132° 6'	127° 4'	121° 6'	115° 2'	113° 4'	111° 8'	108° 2'	112° 2'	112° 6'
	17	112° 0'	107° 6'	119° 2'	116° 4'	118° 2'	108° 6'	110° 2'	114° 5'	125° 2'	117° 4'	114° 7'
	18	120° 4'	120° 4'	121° 8'	122° 7'	118° 4'	113° 6'	110° 9'	111° 0'	108° 4'	109° 5'	108° 4'
	19	—	—	—	—	—	—	—	—	—	—	—
	20	109° 7'	106° 4'	114° 5'	101° 3'	105° 4'	105° 3'	104° 4'	107° 8'	136° 6'	120° 0'	117° 6'
	21	126° 4'	126° 2'	123° 0'	129° 0'	126° 6'	115° 6'	111° 6'	109° 5'	107° 6'	108° 4'	110° 0'
	22	120° 6'	122° 4'	123° 4'	125° 6'	122° 2'	115° 4'	110° 2'	104° 6'	103° 8'	104° 2'	107° 8'
	23	119° 4'	122° 4'	125° 5'	123° 6'	121° 5'	117° 0'	112° 4'	106° 4'	103° 6'	104° 6'	108° 6'
	24	118° 4'	114° 4'	120° 0'	123° 4'	122° 5'	115° 5'	111° 0'	105° 5'	101° 8'	102° 5'	107° 8'
	25	114° 5'	129° 3'	123° 3'	123° 4'	99° 6'	108° 4'	117° 6'	112° 4'	112° 4'	113° 6'	112° 6'
	26	—	—	—	—	—	—	—	—	—	—	—
	27	121° 0'	126° 4'	126° 4'	122° 3'	118° 6'	114° 6'	109° 3'	105° 6'	107° 5'	108° 4'	111° 5'
	28	120° 4'	122° 4'	123° 6'	123° 4'	120° 6'	118° 4'	108° 5'	107° 2'	108° 0'	108° 4'	110° 8'
	29	120° 4'	122° 4'	126° 4'	126° 4'	121° 4'	112° 4'	106° 4'	104° 3'	104° 2'	107° 8'	113° 5'
	30	116° 4'	125° 2'	126° 0'	125° 3'	122° 5'	117° 6'	111° 7'	109° 0'	106° 5'	106° 2'	107° 4'
	31	113° 6'	114° 9'	122° 5'	119° 4'	121° 4'	117° 6'	106° 0'	103° 4'	105° 6'	110° 4'	110° 4'
Hourly Means	120° 09'	121° 99'	124° 35'	123° 77'	119° 58'	115° 60'	110° 55'	108° 60'	109° 00'	109° 17'	110° 66'	111° 97'
APRIL.	1	122° 4'	121° 3'	124° 2'	125° 2'	121° 6'	115° 8'	111° 6'	108° 6'	107° 8'	109° 4'	113° 3'
	2	—	—	—	—	—	—	—	—	—	—	—
	3	103° 4'	108° 6'	107° 6'	120° 2'	116° 6'	115° 8'	114° 2'	111° 6'	104° 4'	108° 6'	123° 3'
	4	122° 8'	127° 2'	128° 0'	129° 2'	129° 0'	112° 8'	105° 8'	103° 4'	107° 4'	106° 6'	108° 3'
	5	129° 0'	118° 0'	110° 4'	98° 0'	118° 6'	117° 6'	114° 2'	109° 5'	113° 4'	113° 4'	122° 2'
	6	121° 4'	128° 7'	132° 1'	127° 4'	124° 4'	119° 0'	113° 5'	106° 7'	105° 4'	107° 6'	110° 6'
	7	129° 0'	118° 0'	110° 4'	95° 0'	118° 6'	117° 6'	114° 2'	109° 5'	113° 4'	113° 4'	122° 2'
	8	115° 6'	122° 4'	124° 6'	123° 2'	119° 5'	116° 6'	112° 6'	109° 6'	109° 4'	110° 4'	112° 6'
	9	—	—	—	—	—	—	—	—	—	—	—
	10	119° 6'	124° 2'	124° 4'	122° 4'	118° 6'	113° 4'	110° 4'	107° 0'	106° 4'	108° 4'	111° 4'
	11	120° 5'	120° 4'	120° 6'	120° 5'	116° 6'	111° 8'	109° 4'	106° 4'	108° 4'	109° 7'	113° 0'
	12	119° 4'	120° 3'	123° 5'	121° 3'	117° 8'	114° 0'	112° 6'	111° 6'	111° 3'	112° 6'	113° 0'
	13	120° 0'	122° 4'	123° 0'	122° 6'	118° 1'	113° 6'	108° 6'	105° 6'	106° 0'	108° 9'	111° 6'
	14	123° 4'	125° 0'	125° 0'	123° 4'	119° 4'	113° 2'	109° 6'	107° 4'	107° 2'	109° 2'	112° 4'
	15	124° 2'	125° 9'	124° 4'	119° 4'	115° 8'	112° 4'	110° 2'	105° 4'	105° 3'	103° 6'	102° 6'
	16	—	—	—	—	—	—	—	—	—	—	—
	17	122° 4'	123° 4'	124° 4'	124° 8'	121° 2'	112° 4'	108° 3'	108° 2'	108° 4'	104° 3'	106° 0'
	18	120° 3'	121° 4'	122° 4'	119° 2'	115° 4'	110° 4'	108° 8'	106° 8'	104° 4'	105° 4'	108° 7'
	19	119° 2'	122° 5'	122° 7'	120° 4'	117° 4'	113° 6'	110° 7'	107° 7'	107° 6'	108° 4'	111° 5'
	20	121° 4'	122° 6'	122° 4'	122° 7'	120° 4'	117° 2'	113° 9'	109° 6'	107° 2'	108° 3'	109° 4'
	21	—	—	—	—	—	—	—	—	—	—	—
	22	120° 6'	127° 4'	117° 5'	119° 4'	113° 4'	115° 4'	108° 5'	105° 7'	106° 6'	107° 4'	110° 8'
	23	—	—	—	—	—	—	—	—	—	—	—
	24	120° 5'	121° 0'	121° 6'	125° 6'	118° 0'	112° 2'	109° 2'	108° 6'	108° 6'	110° 4'	111° 6'
	25	121° 0'	124° 0'	126° 8'	122° 8'	118° 4'	114° 4'	111° 5'	107° 4'	107° 4'	108° 5'	110° 4'
	26	122° 4'	125° 2'	125° 9'	122° 4'	116° 4'	110° 8'	109° 2'	110° 4'	110° 3'	111° 3'	112° 7'
	27	120° 4'	123° 2'	124° 4'	123° 4'	118° 9'	112° 5'	110° 3'	110° 4'	110° 4'	111° 7'	113° 8'
	28	124° 7'	124° 3'	123° 2'	121° 2'	118° 5'	111° 3'	108° 0'	107° 8'	107° 0'	109° 0'	110° 6'
	29	130° 0'	123° 5'	130° 0'	124° 2'	110° 2'	101° 9'	98° 2'	107° 4'	106° 2'	108° 4'	110° 4'
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	121° 40'	122° 54'	122° 48'	120° 66'	118° 45'	113° 57'	110° 15'	108° 01'	107° 91'	108° 95'	112° 18'	113° 18'

* Good Friday.

DECLINATION.

Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.

0°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Means.
Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
119° 4	115° 4	115° 6	115° 9	116° 2	116° 2	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	117° 47
114° 6	115° 4	115° 9	116° 2	116° 2	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
115° 2	115° 6	116° 4	118° 2	117° 4	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
115° 4	116° 3	117° 2	118° 4	118° 0	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
110° 0	111° 4	111° 6	117° 4	115° 8	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
114° 2	114° 8	115° 8	115° 8	117° 4	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
113° 2	114° 2	113° 2	115° 2	121° 8	127° 6	120° 4	122° 4	120° 4	118° 6	118° 7	117° 8	116° 72	116° 72	117° 72
112° 8	112° 4	115° 4	116° 7	118° 5	117° 4	117° 5	117° 7	118° 3	118° 4	119° 0	119° 4	119° 3	118° 12	118° 12
113° 4	114° 4	115° 5	116° 4	116° 9	120° 0	119° 4	117° 6	118° 4	119° 4	118° 4	119° 3	118° 12	118° 12	118° 12
112° 0	114° 5	115° 4	115° 8	117° 2	117° 4	117° 4	117° 4	117° 8	118° 0	117° 9	116° 0	116° 0	116° 0	117° 60
112° 8	115° 6	116° 3	118° 4	118° 5	119° 4	120° 4	120° 4	120° 4	120° 6	120° 6	119° 4	117° 63	117° 63	117° 63
113° 2	114° 2	116° 2	118° 4	120° 2	120° 4	124° 6	130° 8	122° 6	124° 7	122° 4	125° 4	116° 63	116° 63	117° 63
115° 2	116° 2	117° 2	117° 4	116° 7	118° 0	130° 3	128° 2	127° 0	128° 0	121° 8	118° 4	116° 63	116° 63	117° 63
114° 9	115° 4	115° 9	114° 0	114° 1	133° 6	115° 8	116° 6	144° 9	135° 6	137° 3	124° 4	121° 4	121° 4	121° 4
117° 4	111° 4	112° 6	114° 4	115° 6	115° 0	115° 4	115° 4	117° 2	118° 4	118° 6	119° 4	118° 6	119° 4	118° 6
110° 4	111° 4	111° 6	114° 5	113° 9	115° 2	118° 0	105° 4	125° 4	134° 4	118° 2	115° 4	115° 4	115° 4	115° 4
120° 0	114° 4	107° 2	111° 8	109° 4	124° 4	126° 2	113° 2	118° 6	116° 7	124° 4	121° 5	114° 63	114° 63	114° 63
116° 2	113° 2	114° 2	115° 2	115° 5	115° 7	115° 0	115° 0	116° 8	117° 0	118° 4	118° 0	116° 64	116° 64	116° 64
110° 4	109° 3	114° 6	115° 5	116° 4	114° 4	117° 6	116° 6	115° 8	117° 2	117° 4	117° 4	116° 64	116° 64	116° 64
113° 4	113° 0	114° 8	121° 4	117° 2	118° 0	120° 0	118° 4	128° 2	127° 8	127° 8	112° 8	116° 75	116° 75	116° 75
111° 2	112° 6	114° 3	119° 4	121° 7	145° 4	128° 0	124° 4	126° 4	124° 6	120° 5	117° 5	117° 42	117° 42	117° 42
105° 6	111° 5	113° 0	113° 8	115° 2	119° 2	125° 3	121° 6	123° 6	107° 7	114° 4	112° 0	114° 88	114° 88	114° 88
117° 4	110° 4	112° 6	112° 9	114° 7	131° 9	117° 6	115° 4	115° 0	126° 2	122° 0	118° 6	116° 56	116° 56	116° 56
113° 4	114° 4	115° 0	122° 8	120° 9	117° 8	117° 0	117° 3	115° 6	119° 4	117° 0	118° 6	116° 39	116° 39	116° 39
114° 0	114° 4	114° 4	117° 6	115° 2	115° 6	117° 6	117° 4	116° 4	119° 4	119° 4	112° 5	115° 40	115° 40	115° 40
111° 6	108° 2	109° 6	117° 9	121° 2	116° 6	124° 4	123° 5	124° 8	122° 0	119° 3	116° 5	116° 50	116° 50	116° 50
113° 7	111° 6	110° 7	143° 2	126° 6	117° 4	123° 5	130° 5	119° 8	109° 7	122° 6	115° 0	116° 67	116° 67	116° 67
113° 74	113° 39	114° 16	118° 37	117° 50	120° 14	119° 87	119° 22	120° 59	120° 63	120° 63	118° 38	116° 74	116° 74	116° 74
113° 4	124° 2	118° 8	132° 7	116° 5	124° 7	128° 0	120° 2	112° 3	112° 0	123° 5	113° 6	118° 16	118° 16	118° 16
109° 3	107° 0	117° 0	129° 0	126° 0	110° 0	126° 5	115° 0	116° 6	119° 2	115° 5	117° 8	114° 96	114° 96	114° 96
112° 8	113° 0	113° 4	113° 3	119° 4	115° 4	118° 4	118° 5	116° 5	115° 5	119° 0	105° 6	116° 20	116° 20	116° 20
112° 8	117° 4	119° 6	115° 4	115° 8	137° 4	135° 0	122° 4	115° 4	115° 8	110° 0	105° 6	116° 80	116° 80	116° 80
117° 3	116° 5	122° 8	134° 6	111° 4	108° 5	118° 4	102° 8	110° 4	165° 0	156° 0	133° 0	122° 48	122° 48	122° 48
112° 8	117° 4	119° 6	115° 4	115° 8	137° 4	135° 0	122° 4	115° 4	115° 8	110° 0	105° 6	116° 80	116° 80	116° 80
114° 6	113° 8	114° 1	114° 5	114° 5	113° 8	118° 4	118° 9	113° 2	120° 6	119° 4	119° 2	116° 06	116° 06	116° 06
113° 0	114° 0	114° 2	114° 6	114° 7	116° 2	106° 0	117° 6	118° 4	119° 4	120° 0	118° 8	115° 27	115° 27	115° 27
115° 4	115° 4	115° 4	115° 2	115° 5	116° 4	116° 7	117° 8	119° 4	120° 1	119° 0	119° 5	115° 75	115° 75	115° 75
113° 7	114° 3	115° 0	115° 4	115° 6	116° 4	117° 2	117° 6	118° 7	119° 4	119° 1	118° 8	116° 34	116° 34	116° 34
114° 4	114° 4	114° 5	114° 6	117° 7	116° 3	116° 7	116° 9	117° 0	119° 8	119° 0	121° 4	115° 68	115° 68	115° 68
114° 4	114° 5	114° 7	114° 3	115° 5	116° 6	116° 0	118° 4	118° 0	118° 6	119° 1	121° 5	116° 28	116° 28	116° 28
110° 0	125° 6	116° 0	109° 4	108° 0	115° 6	115° 2	112° 4	116° 8	117° 4	120° 9	119° 8	114° 34	114° 34	114° 34
105° 4	112° 4	142° 2	113° 6	116° 6	118° 8	116° 4	122° 2	118° 2	118° 4	118° 5	118° 8	116° 23	116° 23	116° 23
114° 6	114° 5	112° 8	119° 4	117° 2	115° 4	115° 8	116° 5	119° 4	120° 3	120° 2	119° 8	115° 12	115° 12	115° 12
113° 8	114° 4	115° 6	116° 3	116° 6	117° 4	119° 0	119° 9	118° 2	118° 4	119° 0	118° 3	115° 91	115° 91	115° 91
112° 8	114° 5	129° 7	120° 5	122° 4	121° 8	129° 2	149° 4	175° 4	143° 8	135° 8	134° 0	124° 03	124° 03	124° 03
112° 4	114° 4	118° 6	116° 0	116° 8	117° 0	108° 4	116° 4	117° 3	117° 4	115° 4	116° 0	114° 71	114° 71	114° 71
115° 4	122° 8	121° 2	119° 4	120° 4	116° 8	116° 7	116° 5	117° 5	117° 2	117° 4	118° 0	116° 58	116° 58	116° 58
105° 4	116° 9	119° 2	116° 4	116° 0	116° 4	117° 0	116° 2	118° 0	118° 0	118° 0	119° 4	116° 37	116° 37	116° 37
114° 0	113° 8	115° 1	115° 4	116° 2	116° 6	117° 2	118° 0	118° 4	118° 6	117° 6	119° 5	116° 33	116° 33	116° 33
115° 2	115° 4	118° 4	120° 4	116° 4	116° 4	117° 8	119° 4	120° 2	120° 8	121° 2	123° 4	117° 47	117° 47	117° 47
115° 3	114° 5	114° 5	114° 8	115° 8	128° 2	115° 4	131° 5	139° 5	137° 7	138° 3	124° 4	119° 53	119° 53	119° 53
123° 8	127° 2	121° 4	118° 3	114° 8	118° 4	112° 8	114° 4	124° 4	122° 2	116° 6	120° 8	116° 33	116° 33	116° 33
113° 83	116° 18	118° 50	117° 87	117° 73	118° 66	118° 88	119° 22	120° 61	122° 14	121° 19	119° 43	116° 82	116° 82	116° 82



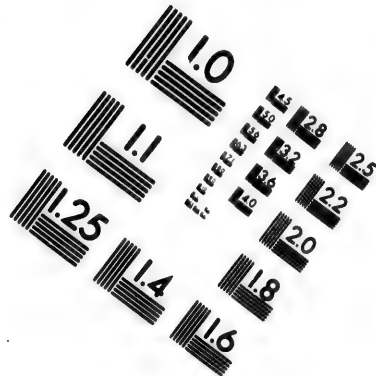
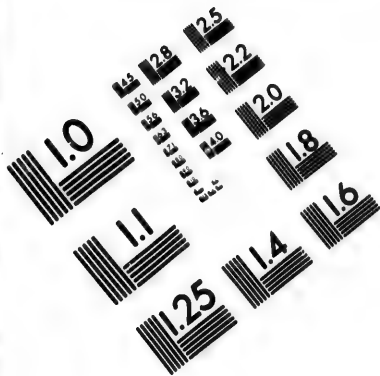
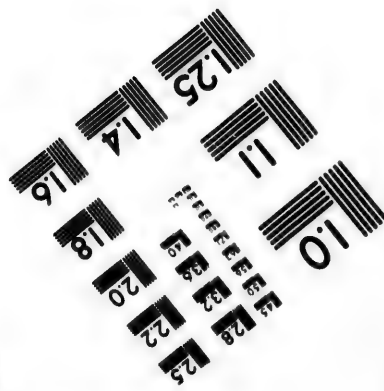
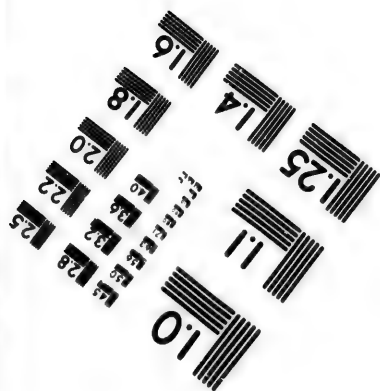
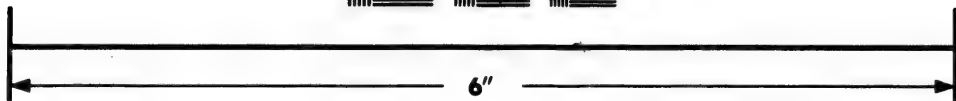
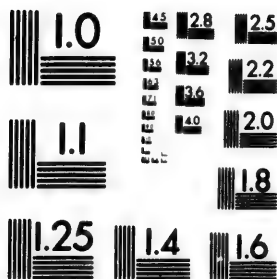


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

1.5 2.8 2.5
1.8 3.2 2.2
2.0 2.0 1.8

10

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .	
MAY.	1	Sc. Div. 122° 6'	Sc. Div. 124° 0'	Sc. Div. 124° 8'	Sc. Div. 124° 6'	Sc. Div. 118° 3'	Sc. Div. 112° 4'	Sc. Div. 109° 6'	Sc. Div. 107° 2'	Sc. Div. 106° 8'	Sc. Div. 106° 6'	Sc. Div. 112° 4'	Sc. Div. 113° 5'
	2	121° 0'	121° 4'	122° 7'	122° 2'	117° 4'	110° 2'	107° 4'	103° 8'	104° 4'	105° 5'	108° 8'	111° 8'
	3	126° 8'	128° 4'	128° 8'	122° 5'	116° 4'	113° 8'	105° 3'	101° 5'	103° 4'	106° 4'	109° 6'	119° 0'
	4	130° 5'	132° 6'	132° 2'	130° 8'	119° 4'	118° 0'	104° 2'	102° 6'	101° 6'	105° 0'	109° 4'	113° 6'
	5	125° 0'	127° 7'	125° 4'	122° 6'	116° 6'	109° 6'	104° 4'	99° 4'	96° 6'	102° 4'	108° 6'	112° 8'
	6	124° 4'	120° 4'	124° 4'	127° 4'	125° 2'	119° 2'	113° 5'	108° 6'	106° 4'	108° 4'	110° 8'	112° 7'
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	114° 4'	116° 4'	111° 3'	108° 2'	106° 6'	108° 2'	108° 8'	107° 7'	108° 4'	116° 0'	112° 4'	109° 6'
	9	123° 4'	125° 0'	122° 4'	116° 9'	112° 0'	113° 4'	113° 4'	110° 4'	108° 8'	105° 2'	105° 3'	108° 8'
	10	109° 3'	115° 9'	111° 6'	110° 4'	115° 6'	123° 4'	102° 4'	104° 6'	102° 4'	107° 6'	107° 8'	114° 5'
	11	123° 4'	126° 5'	122° 0'	124° 6'	117° 2'	113° 8'	110° 3'	109° 2'	109° 0'	109° 4'	111° 5'	113° 4'
	12	126° 5'	125° 4'	126° 0'	121° 5'	112° 4'	107° 0'	105° 4'	103° 4'	104° 8'	107° 4'	110° 4'	112° 7'
	13	123° 8'	127° 7'	128° 0'	123° 8'	116° 0'	107° 4'	104° 0'	104° 3'	104° 0'	108° 9'	113° 1'	115° 9'
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	124° 4'	128° 4'	127° 2'	123° 3'	117° 4'	112° 3'	109° 3'	107° 2'	105° 4'	108° 6'	112° 9'	115° 4'
	16	124° 4'	126° 2'	126° 9'	123° 4'	117° 4'	106° 4'	103° 4'	101° 8'	105° 4'	107° 0'	110° 0'	115° 6'
	17	125° 4'	133° 4'	130° 6'	130° 8'	116° 4'	112° 6'	104° 6'	93° 4'	95° 2'	99° 4'	105° 6'	109° 4'
	18	121° 0'	135° 0'	137° 0'	132° 9'	127° 4'	120° 6'	125° 4'	84° 4'	94° 2'	114° 4'	114° 4'	117° 4'
	19	123° 2'	123° 4'	126° 4'	124° 5'	119° 4'	119° 2'	110° 0'	101° 7'	103° 0'	105° 6'	107° 4'	111° 0'
	20	112° 8'	115° 6'	121° 4'	120° 2'	119° 7'	114° 4'	110° 0'	110° 4'	110° 4'	109° 5'	110° 2'	111° 6'
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	123° 4'	125° 1'	122° 2'	120° 8'	115° 4'	107° 4'	106° 2'	107° 3'	106° 8'	108° 1'	108° 8'	113° 6'
	23	122° 4'	124° 8'	125° 6'	126° 2'	119° 8'	115° 0'	112° 0'	110° 0'	109° 4'	108° 8'	110° 6'	113° 4'
	24	125° 0'	128° 2'	124° 4'	113° 6'	114° 4'	110° 4'	104° 2'	105° 4'	105° 5'	100° 4'	105° 4'	111° 3'
	25	120° 4'	122° 7'	121° 2'	122° 4'	119° 4'	113° 6'	111° 2'	109° 5'	106° 4'	105° 3'	107° 0'	112° 0'
	26	125° 2'	125° 4'	125° 4'	121° 2'	114° 2'	109° 2'	105° 3'	106° 0'	107° 4'	108° 8'	111° 4'	113° 4'
	27	129° 2'	129° 0'	111° 6'	115° 2'	109° 9'	109° 2'	107° 3'	105° 3'	103° 2'	106° 8'	109° 4'	122° 4'
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	123° 4'	123° 9'	124° 0'	121° 8'	117° 6'	113° 2'	108° 4'	108° 3'	110° 4'	111° 7'	113° 7'	114° 2'
	30	124° 0'	124° 4'	124° 4'	124° 4'	119° 4'	113° 6'	107° 2'	103° 8'	104° 8'	107° 6'	109° 0'	112° 4'
	31	125° 4'	129° 3'	127° 5'	132° 4'	120° 8'	108° 8'	108° 4'	105° 4'	101° 6'	104° 4'	106° 4'	110° 4'
Hourly Means		122° 59'	125° 41'	124° 27'	122° 54'	117° 10'	112° 68'	108° 21'	104° 54'	104° 66'	107° 23'	109° 71'	113° 40'
JUNE.	1	124° 4'	126° 6'	123° 2'	121° 4'	116° 5'	109° 7'	107° 6'	110° 0'	107° 5'	107° 8'	110° 4'	113° 0'
	2	124° 3'	125° 4'	125° 5'	122° 5'	118° 4'	112° 4'	106° 6'	104° 4'	103° 6'	106° 6'	109° 2'	112° 4'
	3	126° 2'	129° 0'	129° 6'	126° 0'	121° 0'	114° 4'	106° 2'	102° 9'	101° 5'	103° 5'	108° 8'	111° 2'
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	120° 2'	126° 6'	122° 0'	123° 3'	121° 4'	112° 5'	105° 6'	102° 7'	100° 2'	105° 5'	110° 2'	119° 2'
	6	117° 2'	122° 6'	126° 6'	124° 4'	121° 4'	114° 4'	107° 8'	105° 5'	104° 7'	107° 2'	110° 2'	114° 2'
	7	124° 4'	124° 4'	125° 2'	124° 2'	119° 2'	115° 3'	110° 4'	109° 0'	106° 4'	106° 6'	110° 3'	113° 6'
	8	124° 5'	125° 7'	125° 7'	124° 4'	116° 2'	109° 4'	104° 3'	105° 0'	103° 4'	104° 4'	107° 8'	110° 6'
	9	123° 7'	124° 2'	124° 8'	123° 4'	118° 6'	112° 6'	109° 4'	109° 4'	110° 7'	110° 7'	112° 4'	112° 4'
	10	126° 0'	125° 6'	124° 4'	122° 4'	116° 4'	113° 6'	109° 2'	106° 4'	109° 2'	108° 6'	108° 4'	112° 4'
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	123° 0'	125° 4'	125° 4'	122° 2'	118° 6'	112° 4'	106° 0'	107° 2'	107° 6'	110° 5'	114° 6'	116° 7'
	13	126° 4'	127° 2'	127° 4'	126° 5'	122° 2'	115° 1'	113° 2'	107° 4'	108° 2'	109° 6'	111° 8'	114° 0'
	14	129° 4'	126° 8'	128° 4'	128° 4'	120° 0'	113° 4'	106° 0'	104° 8'	103° 4'	109° 0'	112° 0'	117° 9'
	15	123° 6'	124° 0'	122° 6'	121° 8'	112° 5'	107° 4'	107° 0'	108° 2'	111° 4'	111° 5'	112° 5'	116° 4'
	16	124° 8'	127° 3'	125° 3'	122° 2'	115° 8'	110° 5'	110° 4'	107° 2'	106° 4'	109° 2'	112° 4'	115° 3'
	17	121° 8'	125° 4'	125° 4'	121° 6'	117° 8'	111° 7'	108° 4'	107° 4'	106° 4'	108° 3'	111° 7'	114° 4'
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	124° 4'	127° 4'	126° 5'	121° 4'	119° 4'	113° 4'	109° 4'	106° 4'	105° 4'	103° 4'	103° 8'	109° 4'
	20	115° 5'	120° 2'	126° 9'	124° 0'	121° 4'	118° 4'	110° 8'	108° 0'	108° 4'	106° 0'	109° 6'	112° 8'
	21	124° 8'	127° 5'	120° 2'	121° 3'	118° 5'	108° 4'	107° 8'	107° 4'	106° 5'	109° 7'	110° 2'	109° 2'
	22	117° 4'	126° 1'	126° 4'	125° 0'	123° 0'	112° 6'	114° 9'	106° 2'	106° 4'	111° 5'	118° 9'	117° 4'
	23	121° 2'	123° 4'	124° 4'	123° 6'	118° 8'	112° 0'	107° 1'	107° 2'	109° 7'	113° 4'	113° 0'	114° 8'
	24	122° 4'	121° 9'	123° 4'	123° 6'	120° 4'	115° 6'	111° 3'	112° 0'	102° 4'	107° 3'	111° 4'	113° 0'
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	124° 5'	125° 6'	124° 4'	121° 4'	118° 7'	114° 6'	110° 8'	105° 6'	103° 8'	105° 6'	110° 9'	115° 5'
	27	125° 4'	127° 4'	129° 4'	127° 6'	118° 1'	111° 3'	108° 4'	104° 6'	103° 4'	104° 6'	109° 0'	113° 2'
	28	124° 6'	126° 6'	126° 6'	124° 8'	117° 0'	109° 2'	104° 2'	104° 4'	103° 4'	105° 8'	110° 2'	114° 2'
	29	125° 2'	126° 2'	126° 8'	126° 2'	123° 0'	115° 4'	107° 8'	105° 4'	100° 8'	101° 4'	106° 4'	111° 7'
	30	127° 4'	130° 8'	129° 0'	125° 4'	117° 7'	112° 6'	110° 3'	107° 4'	107° 4'	109° 4'	111° 5'	113° 5'
Hourly Means		123° 57'	125° 74'	125° 60'	123° 81'	118° 92'	112° 63'	108° 50'	106° 62'	105° 70'	107° 68'	110° 68'	113° 86'

		DECLINATION.												
		Angular Value of one Scale Division of the Declinometer = 0'·721. Increasing Numbers denote decreasing Westerly Declination.												
10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
12°4	113°5	114°4	114°1	112°1	121°0	118°8	115°9	116°0	119°4	110°8	111°6	112°0	119°2	115°34
08°8	111°8	112°0	115°5	119°4	123°6	123°6	123°6	117°5	117°6	117°6	102°0	116°5	125°4	115°45
09°6	119°0	117°0	115°6	118°4	140°0	116°4	117°2	115°8	116°6	117°4	118°2	106°2	129°3	117°08
09°4	113°6	114°5	113°2	114°2	114°6	115°2	115°4	117°5	117°0	117°0	115°4	116°4	121°0	116°30
08°6	112°8	117°2	120°8	114°4	115°2	114°9	113°2	115°7	116°0	116°4	116°0	117°4	121°3	114°57
110°8	112°7	115°1	116°4	115°9	117°5	117°2	117°4	—	—	—	—	—	—	118°79
112°4	109°6	110°4	110°8	111°4	119°6	118°3	123°0	125°6	123°6	123°4	124°4	116°4	120°2	114°80
105°3	108°8	110°4	111°4	112°6	113°2	115°8	115°5	115°4	116°4	120°4	121°4	119°4	123°3	115°01
107°8	114°5	115°5	115°4	128°4	120°8	117°4	124°2	118°6	125°9	103°6	115°2	121°1	120°0	114°65
111°5	113°4	114°6	114°4	114°5	114°4	114°7	113°7	116°3	116°0	118°2	118°0	120°8	123°6	116°23
110°4	112°7	114°4	115°4	115°4	118°5	119°0	118°0	118°0	117°0	117°2	116°8	116°3	120°6	115°40
113°1	115°9	116°0	116°4	118°4	115°4	115°3	115°6	—	—	—	—	—	—	116°13
112°9	115°4	116°4	115°5	115°2	115°4	116°4	115°4	115°4	116°6	118°2	119°4	120°4	122°6	115°51
110°0	115°6	117°3	115°2	113°4	114°4	113°6	114°4	115°6	116°4	117°4	117°4	120°2	122°9	116°50
105°6	109°4	111°0	110°8	107°4	116°5	114°9	127°5	123°4	95°8	119°4	116°5	118°7	123°4	115°22
114°4	117°4	118°3	96°4	134°0	107°4	114°4	116°6	116°4	118°6	118°6	119°4	119°4	121°4	117°71
107°4	111°0	112°4	122°4	117°3	115°4	115°6	116°2	116°0	100°4	114°4	115°4	113°4	115°5	114°55
110°2	111°6	113°0	112°6	113°6	114°3	113°5	115°0	—	—	—	—	—	—	114°68
108°8	113°6	115°4	114°4	114°4	114°6	114°8	114°8	114°4	115°0	119°4	119°5	119°3	119°4	114°30
110°6	113°4	115°2	115°4	115°0	115°4	116°4	115°5	114°8	115°8	115°2	114°5	115°5	115°0	114°00
105°4	111°3	113°7	126°1	114°4	111°4	117°7	118°0	118°2	115°4	110°8	113°6	115°0	119°4	114°25
107°0	112°0	112°4	112°0	113°4	113°6	116°0	114°0	113°4	119°6	116°4	116°5	121°2	124°4	115°17
111°4	113°4	114°4	114°0	112°4	112°7	118°4	114°2	115°2	117°8	122°3	128°4	121°9	125°8	116°27
109°4	122°4	115°4	113°4	111°9	113°4	111°7	115°4	—	—	—	—	—	—	113°70
113°7	114°2	115°4	115°4	119°4	112°0	114°4	115°4	115°2	115°4	113°8	112°5	121°4	118°8	115°89
109°0	112°4	114°9	115°3	115°5	117°6	117°0	116°8	118°4	115°8	117°0	109°0	116°6	120°2	115°38
106°4	110°4	118°0	117°0	117°9	130°0	123°4	108°2	121°4	120°7	120°4	117°4	117°6	123°4	117°34
109°71	113°40	114°62	114°64	115°94	116°94	116°44	116°70	116°86	116°13	116°61	117°11	118°04	122°23	115°63
110°4	113°0	117°0	117°6	116°4	115°5	115°5	115°5	116°8	115°8	114°8	116°4	120°7	115°65	115°65
109°2	112°4	114°4	115°4	115°5	118°4	117°5	116°4	115°4	118°3	117°9	119°7	118°4	115°71	115°71
108°8	111°2	111°8	117°4	118°2	123°6	116°4	110°3	—	—	—	—	—	—	115°10
110°2	119°2	119°4	118°2	114°7	114°0	115°2	115°6	114°3	113°4	113°2	111°0	117°5	—	115°80
110°2	114°2	114°4	117°4	115°0	114°6	114°5	115°4	114°5	115°2	115°8	117°4	118°4	120°2	115°38
110°3	113°6	115°6	115°6	115°4	115°3	114°6	114°5	117°3	116°4	116°4	117°2	119°2	122°2	116°20
107°8	110°6	113°3	115°4	114°5	113°7	115°2	120°4	117°2	118°6	115°4	116°5	118°4	117°0	114°87
112°4	112°4	112°8	113°4	114°4	114°0	114°8	121°3	121°7	121°0	119°9	120°8	123°4	123°4	117°22
108°4	112°4	115°3	114°4	113°5	113°4	114°0	114°8	—	—	—	—	—	—	115°15
114°6	116°7	116°8	117°4	116°4	115°4	115°4	114°4	116°0	115°3	114°5	113°2	117°3	120°0	115°90
111°8	114°0	117°4	117°8	116°8	116°5	116°4	116°7	120°4	126°0	123°4	118°8	120°4	120°0	118°32
112°0	117°9	115°4	114°6	116°2	122°2	128°4	117°4	119°6	119°2	116°4	116°0	115°8	119°2	117°50
112°5	116°4	118°4	123°4	119°4	117°4	117°0	120°4	121°0	113°8	113°4	112°6	117°4	121°4	116°44
112°4	115°3	118°4	118°0	116°0	115°0	116°4	114°6	114°4	115°4	115°4	116°5	117°2	118°4	115°94
111°7	114°4	116°0	115°6	115°4	113°4	114°8	115°0	—	—	—	—	—	—	115°54
103°8	109°4	111°4	114°4	112°2	113°4	113°6	113°6	113°4	114°4	109°8	112°0	119°4	117°2	113°96
109°6	112°8	114°4	113°5	122°4	117°2	114°4	113°5	114°0	114°4	116°2	116°0	118°4	120°4	115°70
110°2	109°2	113°4	113°2	111°4	116°0	116°0	117°4	121°4	122°4	126°5	121°3	108°8	127°4	116°11
118°9	117°4	118°4	121°0	123°2	122°4	113°4	115°6	119°7	121°3	113°3	112°4	117°7	121°4	117°73
113°0	114°8	114°4	116°6	120°8	114°3	116°4	118°5	116°4	113°2	116°4	115°8	112°8	113°2	115°72
111°4	115°0	114°7	116°2	117°5	119°4	117°2	119°9	—	—	—	—	—	—	116°12
110°9	115°5	119°7	123°4	117°3	114°0	113°4	115°4	114°4	114°4	113°4	113°4	118°4	120°0	115°78
109°0	113°2	115°0	116°0	114°8	114°9	115°0	114°2	114°4	113°8	114°6	115°8	117°4	120°4	115°36
110°2	114°2	114°5	115°0	119°4	119°4	116°2	114°4	115°0	110°4	117°8	117°3	119°7	122°0	115°50
106°4	111°7	115°6	118°5	117°4	115°6	117°0	118°3	119°6	119°4	121°2	118°4	120°2	120°0	116°56
111°5	113°5	116°2	115°4	113°6	113°4	115°4	115°0	117°0	116°8	116°8	112°4	113°0	119°3	116°11
110°68	113°86	115°54	116°72	116°45	116°25	115°96	116°14	116°72	116°58	116°12	115°86	117°19	119°78	115°94

* Eight minutes late.

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Götting- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JANUARY.	1	629'2	624'0	622'5	620'0	619'0	612'4	614'6	612'7	614'4	620'2	619'4	621'6
	2	617'0	618'0	614'0	613'2	609'3	602'6	604'6	608'7	612'6	615'0	613'4	612'3
	3	614'8	616'0	614'2	608'5	611'4	606'2	603'2	604'0	607'3	613'2	625'4	614'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	620'0	619'8	620'2	617'0	599'6	605'6	605'1	607'2	614'8	620'0	622'5	611'5
	6	614'1	615'9	615'7	615'0	604'5	597'9	603'0	608'0	611'0	617'7	617'5	618'2
	7	616'0	615'1	610'0	610'0	606'5	603'5	578'0	592'4	606'0	611'3	614'0	611'0
	8	603'0	594'5	602'0	612'6	602'2	592'4	594'0	596'8	600'4	607'5	605'2	610'8
	9	609'4	610'7	607'4	600'0	600'0	596'8	598'7	602'7	604'0	608'0	608'0	611'2
	10	614'4	614'0	614'2	612'0	608'0	602'0	608'2	610'0	612'0	608'0	610'7	612'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	624'2	623'8	611'2	622'0	615'0	606'0	602'0	603'0	603'0	610'5	618'5	618'2
	13	621'0	623'5	626'0	625'4	622'2	615'0	613'9	614'9	617'3	620'0	620'9	619'2
	14	609'2	611'6	622'6	618'7	608'1	605'3	604'6	607'8	599'3	601'5	608'5	609'2
	15	621'8	616'6	618'5	623'9	615'6	611'2	612'8	615'0	611'8	609'0	613'9	611'0
	16	602'0	609'0	605'8	599'5	603'0	601'5	600'0	605'0	602'5	592'0	608'5	606'8
	17	614'5	612'5	615'0	612'5	605'2	610'9	607'7	601'5	603'9	608'2	611'9	606'2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	630'0	630'0	627'8	626'0	626'0	627'5	623'0	620'4	624'5	627'0	628'2	629'0
	20	627'5	629'0	627'0	624'5	616'1	614'6	616'2	619'9	624'7	625'0	628'8	628'9
	21	621'4	621'7	623'4	618'1	613'1	611'4	608'0	612'0	621'0	625'0	625'0	621'3
	22	624'9	624'3	624'0	618'5	613'1	608'2	608'4	616'0	624'8	634'5	639'0	637'0
	23	631'5	631'1	628'1	619'2	610'8	607'0	610'0	616'0	626'0	632'0	640'0	632'2
	24	607'0	618'0	619'0	620'0	606'0	599'5	594'7	589'8	594'7	600'9	608'9	607'6
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	611'0	610'0	608'0	603'2	593'7	590'7	594'8	600'8	606'5	612'0	610'0	606'0
	27	610'0	610'8	608'0	602'1	596'2	595'0	597'4	606'2	609'2	615'3	611'0	613'0
	28	610'3	612'8	613'4	597'3	605'0	597'0	597'0	601'3	606'2	613'0	614'8	617'0
	29	605'0	605'6	604'2	600'8	596'6	594'1	597'1	603'5	609'0	612'0	616'0	612'4
	30	606'0	605'0	601'0	596'0	589'5	590'0	593'2	593'0	593'6	597'6	596'0	603'8
	31	604'0	605'0	606'5	605'1	600'0	597'0	594'0	605'4	611'0	615'8	619'6	618'0
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	615'53	615'86	615'17	613'01	607'25	603'75	603'44	606'44	610'06	613'79	616'87	615'53	
TEMPERATURE OF THE BIFILAR MAGNET.													
JANUARY.	1	41'4	41'5	41'5	41'5	41'5	41'7	41'5	41'5	41'7	42'0	42'6	42'8
	2	46'7	46'7	46'4	46'6	46'8	47'0	47'0	47'0	47'0	47'0	46'8	47'3
	3	46'6	46'5	46'5	46'2	46'3	47'0	47'2	48'0	48'0	48'3	48'6	49'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	43'0	42'8	42'6	42'6	43'0	43'8	44'8	45'2	46'2	46'5	46'4	47'0
	6	45'0	45'5	45'6	45'4	46'2	47'2	47'4	48'0	48'0	48'0	48'0	47'7
	7	47'5	47'8	47'4	47'5	47'8	48'5	49'0	48'8	49'0	49'4	49'2	49'5
	8	51'5	51'0	50'4	49'7	49'5	50'0	50'0	49'8	49'4	49'2	49'0	48'4
	9	48'7	48'6	48'0	47'8	47'8	48'0	48'2	48'5	48'7	49'2	49'2	49'0
	10	47'6	47'4	46'8	46'4	46'2	46'9	47'0	47'0	47'5	47'5	47'0	46'6
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	41'5	41'8	41'8	41'2	41'0	41'8	42'5	43'0	43'2	43'5	43'6	43'2
	13	39'6	39'9	39'5	39'2	39'4	40'2	40'8	41'8	42'6	43'2	43'0	42'6
	14	41'6	41'7	41'6	42'2	42'5	43'3	44'2	45'1	46'7	48'0	48'6	48'5
	15	44'7	44'8	44'7	45'0	46'6	47'6	48'4	48'9	49'4	50'5	51'0	51'2
	16	51'2	50'5	49'7	49'0	49'0	49'0	49'0	48'7	48'4	48'5	47'9	47'5
	17	41'5	41'0	40'0	39'4	39'3	39'2	39'0	38'8	38'2	38'0	38'0	37'2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	32'2	33'0	32'9	33'0	34'1	35'0	35'6	36'6	37'0	37'6	39'3	40'0
	20	35'5	35'5	35'0	36'0	36'4	37'0	37'4	38'2	39'0	39'8	40'6	40'7
	21	42'2	41'7	41'0	41'0	40'7	41'0	41'4	41'7	42'3	43'6	43'8	43'9
	22	37'0	37'1	36'6	37'5	38'0	37'5	37'0	37'2	37'6	38'7	39'5	40'3
	23	36'1	36'2	36'1	36'2	37'5	39'4	40'5	41'0	41'5	42'1	43'4	43'4
	24	42'0	41'5	41'5	41'5	42'0	43'0	43'5	43'8	44'0	44'6	45'2	44'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	47'0	47'0	47'0	47'0	47'2	47'8	48'4	49'0	49'0	49'8	50'2	50'0
	27	47'2	46'0	45'0	44'6	45'0	45'4	45'8	46'5	46'7	47'5	47'6	47'4
	28	44'8	45'2	45'2	44'8	45'6	46'5	47'8	48'4	48'5	48'8	49'1	49'0
	29	48'8	48'8	49'0	49'4	49'5	50'2	50'5	51'0	51'0	51'0	51'0	50'6
	30	52'2	52'4	52'0	51'8	52'0	52'5	52'7	53'0	53'0	53'0	53'4	53'4
	31	47'0	45'5	44'7	43'8	43'3	43'0	42'8	43'0	43'3	44'3	44'8	45'2
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	44'08	43'98	43'65	43'57	43'86	44'43	44'79	45'17	45'44	45'91	46'18	46'13	

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
623'3	619'0	617'6	619'0	613'8	618'0	616'2	617'0	617'0	620'0	618'0	618'0	618'62
611'7	610'4	609'7	608'0	610'4	610'0	608'0	608'0	610'0	610'0	611'7	614'2	618'95
607'7	599'0	607'0	601'0	608'5	611'0	—	—	—	—	—	—	611'34
—	—	—	—	—	—	614'0	615'2	617'0	616'2	617'4	619'6	—
619'0	614'0	605'0	614'8	612'0	611'2	612'4	611'0	611'8	613'0	615'4	614'7	613'23
615'8	607'7	606'0	606'8	611'0	609'9	608'0	621'4	614'3	612'6	610'9	608'0	611'29
611'5	600'8	601'2	592'0	605'5	610'0	601'7	600'0	595'2	595'4	601'0	602'5	603'78
610'0	609'2	607'7	606'7	606'2	607'6	607'0	607'0	609'0	609'5	610'0	609'0	605'01
613'8	611'8	610'0	610'0	610'0	611'0	610'5	610'4	611'0	611'6	613'0	604'4	607'68
612'4	614'2	612'4	611'2	611'5	612'0	—	—	—	—	—	—	—
617'0	614'8	613'2	615'0	616'0	617'4	617'0	616'0	618'0	617'1	619'0	620'5	614'93
612'4	607'7	567'6	599'2	595'5	609'0	608'0	614'0	615'0	615'0	617'0	617'7	613'22
609'0	595'0	612'4	610'0	611'0	611'0	611'0	613'0	610'4	608'2	610'0	616'6	609'33
612'0	614'0	613'0	614'9	611'2	607'0	601'8	600'1	605'0	607'6	606'3	606'0	611'67
610'8	606'9	608'0	605'6	609'0	615'0	608'8	596'2	597'7	598'0	605'0	613'5	605'00
620'5	623'1	623'0	612'0	615'1	615'0	—	—	—	—	—	—	—
—	—	—	—	—	—	628'0	630'0	630'0	632'0	637'0	626'0	616'74
628'2	628'2	626'8	626'7	628'5	628'9	627'4	628'0	628'0	628'0	630'0	626'7	627'28
624'3	625'2	627'2	625'0	628'9	627'0	621'5	617'7	620'0	622'0	622'0	622'6	623'57
622'0	621'0	620'0	618'0	621'2	621'2	620'7	620'4	620'8	622'6	622'8	624'1	619'84
632'9	628'0	628'0	624'0	623'4	625'0	625'0	625'4	626'5	629'0	630'0	630'5	625'02
590'0	616'3	618'0	613'2	611'8	611'2	610'0	598'0	571'0	577'7	595'2	610'0	612'76
607'2	611'6	613'8	611'9	613'0	612'2	—	—	—	—	—	—	—
605'9	606'0	606'8	607'0	608'0	607'0	610'0	610'0	610'8	610'0	610'8	612'0	608'68
614'0	614'9	614'4	611'1	605'1	609'0	609'0	610'0	610'4	613'8	616'0	610'2	605'61
614'0	597'0	605'0	589'5	589'4	596'4	602'0	598'0	596'8	599'3	600'0	604'6	603'21
610'2	611'2	607'8	606'8	598'5	607'4	602'8	603'0	600'5	601'9	600'0	604'0	604'60
606'8	602'8	598'8	602'8	603'9	599'6	579'0	598'8	594'2	602'0	604'0	601'5	579'12
614'0	614'5	610'8	612'8	612'0	613'0	—	—	—	—	—	—	—
—	—	—	—	—	—	627'0	625'0	626'0	629'0	629'0	629'4	613'50
613'94	612'01	610'79	610'19	610'76	612'33	612'32	611'63	610'99	611'93	613'97	615'00	611'77

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
43'2	43'0	42'8	43'0	43'0	42'8	43'3	44'0	44'2	44'6	45'7	46'4	42'80
47'7	48'0	48'0	48'4	49'0	49'0	48'7	47'4	47'0	46'5	46'2	46'5	47'28
49'0	49'0	49'0	48'3	48'4	48'5	—	—	—	—	—	—	—
—	—	—	—	—	—	41'5	41'5	41'7	42'0	42'2	43'0	46'35
47'5	47'5	47'2	47'0	46'8	46'8	46'5	46'2	45'4	45'0	45'0	45'0	45'41
47'5	47'0	46'5	46'5	46'5	46'2	46'2	46'6	47'2	47'2	47'4	46'79	—
49'4	49'8	50'2	50'5	50'7	50'7	51'0	50'8	51'0	51'5	52'0	51'5	49'60
48'5	48'8	48'8	49'0	49'0	48'9	49'0	49'0	49'5	49'5	49'5	49'0	49'43
49'2	48'8	48'5	48'1	48'1	48'4	48'5	48'2	48'2	48'4	48'3	47'9	48'43
47'0	46'6	45'8	45'6	45'4	45'2	—	—	—	—	—	—	—
—	—	—	—	—	—	40'2	40'2	40'4	40'5	41'0	41'0	45'03
43'6	43'2	43'2	42'6	42'0	41'6	41'5	41'2	41'4	41'4	40'8	40'0	42'04
43'0	42'6	42'7	42'8	42'0	41'6	41'9	42'0	42'2	42'0	42'0	42'0	41'58
48'6	48'5	47'4	47'4	47'6	47'7	47'5	47'0	46'6	46'2	46'0	45'0	45'68
51'0	51'2	51'2	51'2	51'2	51'2	51'0	50'8	51'2	51'5	51'5	51'2	49'46
47'9	47'5	46'8	46'4	45'5	45'2	44'7	44'6	44'2	43'8	43'6	42'6	46'87
38'0	37'2	37'0	36'4	36'2	36'0	—	—	—	—	—	—	—
—	—	—	—	—	—	30'4	30'6	31'2	31'6	31'7	31'2	36'46
39'3	38'0	37'4	36'9	36'1	36'2	36'0	35'2	35'4	35'4	35'7	35'6	35'97
40'6	40'7	41'7	42'2	42'8	42'5	43'0	42'2	42'5	42'5	42'5	42'5	39'98
43'8	43'9	45'0	44'5	43'5	42'0	41'6	41'3	39'6	38'4	38'0	37'0	41'85
39'5	39'3	38'6	38'2	38'0	37'6	37'2	36'3	35'8	35'5	35'3	35'5	37'53
43'4	43'0	42'7	41'8	41'4	41'0	40'8	40'4	40'7	41'0	41'2	41'5	40'52
45'2	44'0	44'8	45'3	45'5	45'7	—	—	—	—	—	—	—
—	—	—	—	—	—	45'5	45'9	46'3	46'3	47'0	46'7	44'32
50'2	49'8	49'5	49'2	49'4	50'0	50'0	49'0	48'8	48'5	48'0	47'5	48'71
47'6	46'5	46'4	45'6	46'0	46'2	45'8	45'4	45'4	45'4	45'0	46'0	46'02
49'1	49'5	49'5	49'3	49'3	49'2	49'0	48'8	48'8	48'5	49'0	49'0	48'04
51'0	50'0	50'0	50'4	50'8	50'8	51'2	51'5	51'9	51'8	52'1	52'0	50'56
53'4	53'6	53'6	53'8	53'9	53'2	52'7	52'0	51'5	51'0	50'0	48'0	52'43
44'8	44'7	44'4	44'5	44'4	44'0	—	—	—	—	—	—	—
—	—	—	—	—	—	32'0	32'5	33'5	34'0	34'5	35'2	41'64
46'18	45'97	45'83	45'67	45'61	45'49	44'30	44'05	44'08	44'06	44'07	43'87	41'84

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
FEBRUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	630'2	627'0	628'8	618'4	610'6	607'2	608'8	608'2	614'2	619'0	620'2	618'8
3	617'4	618'8	615'0	610'0	595'4	595'0	596'0	596'2	600'0	605'0	610'0	610'0
4	612'7	615'0	611'7	603'0	595'0	593'0	590'9	586'0	594'0	604'0	606'5	610'0
5	611'5	611'0	608'7	605'2	600'5	594'0	594'5	596'0	600'0	601'4	602'0	604'8
6	608'0	607'0	607'0	605'4	601'0	597'0	600'0	600'6	603'4	603'4	604'4	603'6
7	610'0	604'6	607'2	604'0	593'6	591'8	594'2	599'6	604'4	602'6	607'2	605'6
8	—	—	—	—	—	—	—	—	—	—	—	—
9	627'4	630'5	611'6	555'0	628'0	621'6	618'8	621'0	623'0	622'0	621'0	622'0
10	628'0	623'0	631'4	633'0	631'5	627'4	624'2	630'0	635'5	630'5	627'0	627'8
11	620'4	618'0	619'0	612'0	610'0	614'0	613'0	617'0	614'2	623'0	623'0	619'0
12	624'0	621'0	619'0	616'2	612'4	609'2	609'2	614'6	608'2	622'2	613'2	615'0
13	619'8	619'7	614'0	608'2	608'0	606'0	606'5	610'8	614'8	615'6	616'0	614'0
14	604'6	602'4	608'8	607'2	608'0	603'2	606'6	610'6	609'0	627'0	611'8	617'5
15	—	—	—	—	—	—	—	—	—	—	—	—
16	612'0	619'2	607'3	613'5	608'0	604'4	608'4	597'2	605'4	612'2	606'0	598'0
17	617'0	618'0	609'0	605'0	611'0	608'2	606'5	605'2	610'0	594'0	604'8	605'4
18	614'0	616'0	607'0	604'0	607'0	605'0	596'0	599'8	596'2	602'2	601'5	606'0
19	615'0	614'2	614'0	616'8	617'7	616'8	618'8	617'4	616'0	610'2	611'6	611'0
20	619'2	620'4	620'0	618'4	616'0	616'0	614'0	614'2	617'0	618'8	615'4	612'0
21	612'0	610'8	608'0	606'0	609'2	612'2	612'5	610'0	609'5	605'0	610'0	610'4
22	—	—	—	—	—	—	—	—	—	—	—	—
23	626'0	626'0	625'0	621'0	618'0	615'0	615'2	615'0	617'2	618'4	620'8	619'4
24	622'5	621'0	620'0	619'4	622'0	624'2	621'2	620'4	622'0	622'8	618'4	618'2
25	623'0	619'4	618'4	619'2	618'0	617'2	618'6	619'0	624'0	628'2	609'0	614'0
26	622'8	621'4	620'5	614'0	610'4	613'6	603'4	620'0	615'0	629'0	617'0	605'0
27	627'6	627'8	625'5	621'4	618'5	614'5	615'0	616'0	611'0	620'0	622'0	623'2
28	622'1	620'0	616'6	613'2	608'1	604'8	606'3	610'0	613'8	618'0	617'0	620'4
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	618'63	618'01	615'56	610'40	610'75	608'80	608'28	609'78	611'58	614'75	613'26	612'97

TEMPERATURE OF THE BIFILAR MAGNET.												
FEBRUARY.	°	°	°	°	°	°	°	°	°	°	°	°
2	35'6	35'4	34'8	35'0	36'0	36'2	37'2	38'7	39'2	39'7	40'4	40'5
3	43'5	43'6	43'8	44'0	44'3	45'0	45'6	46'0	46'8	47'8	48'7	48'5
4	46'0	46'2	46'8	47'2	48'6	49'1	49'0	48'5	48'5	49'0	49'0	48'2
5	49'0	48'8	49'0	50'1	51'0	51'4	51'0	50'8	51'4	52'0	52'0	51'4
6	49'2	48'9	48'5	48'5	49'0	50'0	50'0	50'6	51'2	51'6	52'0	51'7
7	49'2	48'6	47'4	48'2	49'2	50'2	50'4	50'5	50'1	50'0	50'0	49'7
8	—	—	—	—	—	—	—	—	—	—	—	—
9	32'8	33'0	33'0	33'7	34'5	34'6	34'6	34'6	35'0	35'6	36'0	36'4
10	33'3	33'0	33'0	33'0	34'0	34'3	35'0	36'0	37'3	38'0	38'4	38'3
11	42'3	42'5	42'0	41'9	41'9	43'2	43'5	43'8	44'0	44'0	44'0	44'2
12	39'4	38'7	38'9	39'0	40'5	40'7	41'3	41'8	42'2	42'4	42'8	43'0
13	43'8	44'0	43'8	43'6	43'6	44'6	45'5	46'2	47'1	47'8	48'0	48'6
14	45'4	44'6	44'0	43'2	43'4	44'2	45'0	45'8	46'8	47'5	47'8	47'0
15	—	—	—	—	—	—	—	—	—	—	—	—
16	43'0	43'2	43'0	43'2	44'0	44'5	44'6	44'7	44'6	44'8	45'0	44'6
17	44'0	44'0	43'5	44'0	44'5	46'0	47'0	47'4	47'4	47'7	48'0	47'4
18	44'5	44'0	43'9	44'5	45'5	46'6	46'8	47'4	47'8	48'4	48'5	48'2
19	42'0	41'8	41'0	40'6	41'2	42'0	43'0	43'5	43'7	43'7	43'4	43'0
20	42'0	42'0	41'6	41'7	42'0	43'0	43'5	44'0	44'8	45'5	46'4	46'5
21	46'7	46'5	46'4	46'4	46'6	48'0	48'6	49'2	48'4	48'0	47'8	47'5
22	—	—	—	—	—	—	—	—	—	—	—	—
23	37'4	37'4	37'2	38'8	39'5	40'4	40'5	40'6	40'7	41'0	41'6	41'5
24	39'4	38'6	38'8	38'8	38'8	39'6	40'8	41'6	42'6	42'8	42'8	42'5
25	40'0	39'2	38'4	38'0	38'6	39'4	40'4	40'8	41'0	41'4	42'0	41'5
26	36'2	34'8	34'9	35'1	35'8	36'7	37'2	37'2	37'5	38'4	37'8	37'0
27	30'0	29'0	29'7	30'5	31'2	33'4	35'0	37'0	38'0	38'7	38'8	38'2
28	39'0	39'0	38'0	37'8	38'0	39'0	40'0	40'4	40'8	41'0	41'4	42'0
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41'40	41'12	40'89	41'12	41'74	42'59	43'15	43'61	44'04	44'45	44'69	44'48

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H.F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
622°0	622°0	618°0	615°0	620°0	620°0	618°5	619°2	618°4	618°0	616°2	621°4	618°34
614°5	614°0	614°0	607°6	607°2	609°0	611°2	611°2	611°0	614°2	613°2	613°7	608°73
609°2	608°7	609°4	607°8	609°2	609°2	609°2	610°8	610°7	611°0	612°2	612°2	605°89
606°2	607°0	606°5	607°3	607°2	607°4	607°0	608°0	607°5	608°0	607°0	608°0	604°86
604°0	605°0	599°2	603°0	601°0	605°0	604°0	599°0	601°0	598°0	602°0	606°0	602°83
607°0	606°0	606°0	606°0	608°0	608°5	—	—	—	—	—	—	—
—	—	—	—	—	—	608°0	607°4	605°0	602°0	604°4	623°6	604°86
622°0	624°0	626°0	613°4	614°2	614°0	620°2	623°0	623°2	624°8	624°4	625°8	619°04
622°2	621°0	617°2	620°0	618°6	619°6	622°0	621°6	617°2	618°2	619°4	620°0	624°43
617°4	617°8	616°4	620°0	620°4	619°6	618°2	620°0	620°0	618°4	621°2	618°0	617°92
614°0	613°7	610°0	617°0	619°0	619°0	617°0	617°0	617°0	617°0	617°0	617°0	615°79
607°5	603°0	598°0	612°0	603°0	607°0	607°0	606°5	606°0	606°8	605°0	602°2	609°06
602°0	611°0	617°0	607°6	607°2	610°0	—	—	—	—	—	—	—
—	—	—	—	—	—	606°6	607°4	611°8	615°4	613°2	607°2	609°71
591°2	610°2	606°2	610°0	611°5	613°4	615°0	615°0	618°0	613°2	608°8	611°0	608°96
609°2	613°8	611°9	609°0	612°2	612°0	611°0	614°0	612°2	613°0	613°0	611°0	609°85
607°0	609°0	608°0	609°0	609°0	610°0	608°5	610°0	612°0	612°0	610°5	613°0	607°20
616°0	614°0	615°0	618°0	618°0	618°5	617°5	617°8	619°4	618°0	619°2	618°6	616°23
613°0	609°0	616°0	608°0	608°0	610°0	609°2	606°4	606°6	608°8	610°0	607°2	613°07
610°0	610°0	612°0	610°2	611°4	610°0	—	—	—	—	—	—	—
—	—	—	—	—	—	622°0	623°0	620°0	618°6	625°0	—	613°03
621°0	623°2	622°8	622°0	621°8	622°7	622°8	623°0	623°0	623°0	622°4	622°0	621°11
618°2	618°0	618°1	618°0	620°0	621°0	621°0	621°0	621°0	621°0	621°0	621°4	620°58
608°0	604°0	602°0	611°0	612°0	616°0	615°0	612°0	612°7	618°0	618°7	619°6	615°71
617°0	617°0	608°0	601°7	614°0	620°0	622°0	620°8	624°0	624°2	622°0	626°5	617°18
623°0	623°4	624°2	625°4	619°8	619°6	618°4	622°4	622°1	621°0	621°3	622°0	621°03
619°8	620°6	620°0	622°0	621°0	622°7	—	623°7	627°0	628°0	631°2	627°0	619°30
—	—	—	—	—	—	—	—	—	—	—	—	—
612°56	613°56	612°58	612°67	613°07	614°34	614°88	615°15	615°32	615°57	615°59	616°68	613°53

TEMPERATURE OF THE BUILAR MAGNET.

40°5	41°0	41°2	41°4	41°5	42°0	42°4	42°5	42°8	43°0	43°2	43°5	39°74
48°4	48°5	48°5	48°0	47°8	47°8	47°4	47°4	47°2	47°0	46°6	45°7	46°58
47°8	47°8	47°8	47°6	47°8	47°8	47°4	47°0	47°0	47°2	47°2	47°7	47°76
50°6	50°4	50°4	50°3	50°7	51°0	51°0	51°2	51°0	51°0	50°5	49°6	50°65
51°0	51°1	51°0	50°5	50°5	50°2	50°4	50°5	50°0	49°6	49°3	49°0	50°19
49°8	49°5	49°0	47°8	46°5	45°5	—	—	—	—	—	—	—
—	—	—	—	—	—	33°7	34°0	34°8	35°0	35°6	32°8	45°31
35°5	35°5	35°5	35°4	35°1	35°0	34°5	34°0	34°2	33°8	33°8	33°3	34°56
38°2	38°6	38°8	38°2	38°5	38°6	39°4	39°9	41°0	41°7	42°0	42°5	37°54
43°6	42°8	41°8	41°2	41°2	41°5	41°7	41°5	41°2	41°2	41°4	40°0	42°35
42°6	42°6	42°0	41°8	42°0	42°0	42°4	42°9	43°0	43°4	43°8	43°9	41°80
48°2	48°6	48°4	47°5	47°4	47°8	48°4	47°6	47°7	47°2	46°7	45°6	46°57
47°0	46°9	46°1	45°8	45°2	45°0	—	—	—	—	—	—	—
—	—	—	—	—	—	40°2	40°6	40°8	41°8	42°2	42°7	44°54
44°4	44°5	44°0	43°8	43°6	43°6	43°4	43°2	43°6	43°9	44°0	44°0	43°97
47°0	46°4	46°2	45°6	45°5	45°5	45°2	45°0	45°2	45°6	45°0	45°0	45°76
47°9	48°0	47°8	47°0	47°0	47°0	46°6	45°0	44°2	43°5	42°5	42°0	46°03
41°8	42°0	41°6	41°5	41°5	41°5	42°0	42°0	42°4	42°5	42°4	41°8	42°16
47°0	48°0	48°0	47°2	47°0	47°3	47°5	47°4	47°6	47°6	47°4	47°0	45°50
47°0	47°3	47°0	46°6	46°4	46°0	—	—	—	—	—	—	—
—	—	—	—	—	—	38°0	37°6	38°9	39°4	38°0	37°8	45°00
41°0	40°8	40°8	41°0	40°7	40°6	40°4	40°0	39°9	39°5	39°4	39°0	39°99
41°7	41°4	41°6	41°4	41°0	40°6	40°6	40°4	40°0	39°5	39°5	39°3	40°59
40°4	40°8	39°8	39°4	40°0	40°0	39°8	39°6	39°4	38°4	38°0	37°0	39°72
36°0	36°0	35°5	35°0	34°6	33°5	33°0	32°4	31°8	31°2	31°2	30°5	34°97
37°8	38°8	40°0	40°2	40°0	40°1	40°1	39°8	38°9	39°2	39°5	39°5	36°81
41°2	41°4	41°4	41°7	41°4	41°1	—	—	—	—	—	—	—
—	—	—	—	—	—	34°2	33°7	33°6	33°4	33°4	33°4	38°60
44°69	44°48	44°02	44°11	43°93	43°58	43°45	43°38	42°08	41°89	41°92	41°88	41°81
—	—	—	—	—	—	—	—	—	—	—	—	41°36
—	—	—	—	—	—	—	—	—	—	—	—	42°78

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Guttin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	2	629'0	626'5	624'0	617'6	613'0	605'4	611'2	613'6	615'6	619'2	624'8
	3	621'6	620'4	615'8	612'0	607'6	602'2	602'8	604'8	606'6	609'0	614'2
	4	617'8	616'2	613'4	613'3	606'1	597'0	604'8	601'4	608'5	600'2	605'0
	5	609'0	606'4	606'0	605'0	608'5	606'0	600'2	598'8	599'2	604'0	601'0
	6	609'5	607'4	605'4	603'0	597'0	594'0	594'5	595'0	600'2	601'2	607'5
	7	615'0	614'5	611'0	607'4	601'4	601'4	601'4	599'2	601'6	606'4	607'9
	8	—	—	—	—	—	—	—	—	—	—	—
	9	614'0	618'4	607'0	605'4	603'2	595'8	592'2	594'8	599'0	602'8	606'0
	10	610'0	608'2	604'8	600'0	594'3	590'4	587'3	588'0	595'1	599'7	605'0
	11	610'0	610'2	608'2	608'5	602'5	595'6	594'4	598'9	605'0	595'5	600'0
	12	607'0	607'0	597'9	595'0	591'5	587'5	584'5	588'8	591'2	594'6	603'7
	13	607'5	599'0	593'0	589'8	575'5	577'7	564'6	586'2	582'8	591'0	585'4
	14	594'0	584'8	584'6	565'5	569'2	564'7	562'5	571'2	582'5	592'2	599'5
	15	—	—	—	—	—	—	—	—	—	—	—
	16	607'2	603'5	596'4	596'2	595'4	590'0	584'4	581'4	594'4	603'0	601'8
	17	591'4	574'6	592'0	589'4	593'9	580'0	583'5	587'5	590'2	614'0	605'6
	18	590'0	607'9	604'0	595'5	594'7	588'5	587'6	591'0	598'6	605'0	600'9
	19	600'0	598'0	592'8	585'0	583'4	581'8	578'0	578'5	583'4	589'8	590'3
	20	598'0	600'6	598'0	593'2	582'0	573'4	570'6	574'0	581'0	590'0	589'8
	21	598'6	595'8	593'7	590'2	585'0	581'1	583'4	591'0	592'0	592'2	597'9
	22	—	—	—	—	—	—	—	—	—	—	—
	23	610'0	607'2	602'2	595'6	589'5	584'8	585'0	590'8	593'0	598'0	602'0
	24	607'4	608'0	599'0	589'0	584'0	586'5	588'0	587'8	602'0	607'7	606'0
	25	610'5	611'0	607'0	601'2	591'8	589'9	591'2	593'1	598'1	608'9	608'7
	26	599'9	606'1	607'9	596'9	595'9	596'9	593'1	595'2	594'7	602'5	590'1
	27	602'4	600'5	595'9	586'4	576'4	580'9	584'9	574'7	591'3	596'5	602'1
	28	603'7	599'9	592'9	591'2	589'4	583'7	585'9	583'9	586'7	592'4	601'9
	29	—	—	—	—	—	—	—	—	—	—	—
	30	616'7	611'4	607'4	595'9	577'9	584'9	578'9	582'1	588'9	596'2	607'9
	31	610'9	608'9	607'0	599'2	594'0	588'1	589'0	591'5	600'7	604'1	614'2
Hourly Means		607'35	605'48	602'59	597'21	592'54	588'78	587'84	590'24	595'47	600'62	603'16
TEMPERATURE OF THE BILAR MAGNET.												
MARCH.	2	34'0	34'4	35'4	37'5	39'0	40'6	41'5	42'2	42'4	43'0	43'1
	3	40'4	39'6	40'0	41'0	42'6	44'0	44'8	45'4	46'0	46'4	47'0
	4	44'4	43'6	44'6	45'9	47'4	48'4	48'4	48'5	49'2	49'5	49'5
	5	48'4	47'8	48'2	48'9	49'8	51'0	51'4	51'9	52'9	51'0	54'5
	6	49'4	49'2	49'0	49'2	49'0	49'0	49'4	50'0	50'4	51'2	51'0
	7	44'0	43'9	44'0	45'2	46'2	47'0	46'8	46'8	46'6	46'8	46'3
	8	—	—	—	—	—	—	—	—	—	—	—
	9	47'7	47'6	47'3	47'6	49'2	50'3	50'8	51'4	52'0	52'6	53'0
	10	50'4	49'2	49'6	50'9	52'5	53'0	53'3	53'3	53'1	53'5	54'0
	11	48'2	48'2	49'2	50'5	52'5	53'8	54'0	54'4	54'4	54'9	55'4
	12	52'2	52'0	52'0	52'0	52'9	53'1	53'5	53'6	53'7	54'0	54'0
	13	55'0	55'0	54'6	54'3	54'0	54'4	54'8	55'2	55'2	55'0	54'8
	14	54'7	54'5	53'8	54'0	53'8	54'0	54'0	54'2	54'2	54'5	54'3
	15	—	—	—	—	—	—	—	—	—	—	—
	16	46'8	46'4	46'8	46'5	46'2	46'7	47'0	47'2	47'5	47'6	47'5
	17	44'6	44'0	43'7	44'0	43'4	43'4	44'0	44'8	46'2	48'0	49'7
	18	44'5	44'0	44'0	44'5	45'8	47'5	48'1	49'1	50'0	51'6	52'4
	19	53'5	53'0	52'6	53'4	54'0	55'0	55'2	56'0	56'4	56'5	56'3
	20	52'2	51'8	52'4	53'6	54'2	55'0	55'3	55'8	56'3	57'0	57'2
	21	52'4	51'8	51'0	50'5	50'0	50'0	49'9	50'0	50'0	50'8	51'8
	22	—	—	—	—	—	—	—	—	—	—	—
	23	47'2	47'6	48'4	50'0	51'9	52'2	52'8	53'0	53'0	53'3	53'2
	24	52'5	52'5	52'5	52'1	52'2	52'0	52'4	52'6	52'4	52'5	52'7
	25	52'0	51'5	51'4	51'2	51'4	51'8	52'0	52'4	52'4	52'8	53'4
	26	51'4	51'2	51'0	51'0	51'7	52'2	52'6	53'0	53'2	53'6	53'2
	27	50'8	51'3	51'0	51'0	51'8	51'7	52'0	52'2	52'2	52'2	52'5
	28	50'5	50'4	50'1	50'3	50'8	51'5	52'0	52'5	52'5	52'5	52'0
	29	—	—	—	—	—	—	—	—	—	—	—
	30	46'0	46'4	48'2	48'6	48'8	49'0	49'4	49'6	49'4	49'7	49'6
	31	47'6	47'6	49'0	49'4	50'4	50'6	50'6	50'6	50'4	50'2	50'2
Hourly Means		48'49	48'25	48'45	48'97	49'67	50'28	50'62	50'99	51'17	51'63	51'90

HORIZONTAL FORCE.

One Scale Division = $\frac{1}{1000000}$ parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.

0h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
418	619.0	619.2	622.0	621.6	620.0	619.4	619.0	620.0	620.0	620.0	621.0	621.5	621.0	619.32
422	612.0	617.0	617.0	616.0	613.0	613.0	612.0	616.0	612.4	612.0	618.0	616.0	615.6	612.79
450	610.0	611.0	612.5	611.5	610.0	607.8	600.0	602.0	601.8	605.4	603.2	603.0	610.0	607.16
470	605.0	605.2	601.0	601.0	603.4	598.2	601.8	601.0	605.2	601.0	602.2	608.0	608.0	604.17
475	607.0	607.8	610.0	608.2	609.2	609.3	607.8	607.2	607.7	612.5	612.4	613.5	614.3	605.90
479	609.8	616.0	615.0	615.0	615.2	614.0	614.2	—	—	—	—	—	—	610.33
480	607.5	608.0	608.0	608.0	609.0	609.0	607.0	607.0	606.2	607.4	609.2	610.0	—	605.87
485	606.0	606.5	606.0	604.0	605.0	604.7	605.0	604.2	606.8	608.4	608.0	608.8	609.2	602.73
487	606.2	607.2	609.0	593.0	596.4	596.2	597.4	609.0	603.0	602.2	600.2	604.2	603.8	602.23
490	596.4	594.0	594.8	594.4	597.0	597.6	600.1	601.0	600.9	604.2	600.0	606.0	610.0	598.05
493	587.5	582.0	592.4	588.2	580.0	580.5	583.0	580.0	569.0	571.5	586.0	577.0	591.8	583.93
495	599.0	584.0	585.5	579.5	587.0	587.0	586.0	—	—	—	—	—	—	588.23
501	602.0	599.9	592.0	597.0	595.2	620.4	594.8	604.2	599.0	599.2	601.0	597.0	—	597.77
505	612.0	607.2	601.0	608.0	600.0	595.6	601.4	597.8	598.7	594.2	561.4	576.4	601.0	594.28
509	607.0	600.8	595.0	602.8	603.4	603.5	601.8	602.0	602.0	600.0	600.0	600.0	601.0	599.29
510	595.2	600.1	600.6	598.6	597.3	598.5	598.2	598.0	597.5	599.0	599.0	601.0	599.2	593.47
518	585.0	595.8	597.6	594.5	594.5	598.8	599.0	600.0	599.4	601.0	599.4	599.6	599.8	592.29
519	604.0	599.0	598.0	600.0	600.4	601.6	602.0	—	—	—	—	—	—	598.29
520	603.2	605.0	607.2	607.0	606.4	605.8	604.2	603.4	603.2	604.0	605.5	607.4	605.0	601.06
526	608.6	605.1	605.8	606.0	606.2	605.6	605.6	607.0	607.0	607.4	609.0	612.0	610.0	602.53
527	607.1	606.1	607.9	608.4	604.9	604.1	604.1	602.3	603.6	601.9	601.9	609.1	611.5	603.76
530	598.7	603.5	601.7	600.9	599.9	598.9	608.9	598.4	601.9	603.7	601.9	605.5	600.7	600.16
532	598.4	592.9	598.1	601.9	601.9	601.3	602.2	602.1	603.9	603.7	604.3	605.5	607.9	596.50
534	605.9	607.1	587.9	583.9	598.3	597.3	603.3	—	—	—	—	—	—	598.85
537	614.3	611.3	610.2	609.9	608.5	608.9	608.3	608.8	609.0	609.9	611.2	613.9	615.0	603.68
541	604.9	600.7	604.7	604.9	602.4	607.9	609.1	608.4	607.9	609.9	609.9	611.9	612.1	604.39
543	604.30	603.32	603.23	602.78	602.55	602.30	604.03	603.80	604.32	604.85	604.31	606.18	607.81	601.03

TEMPERATURE OF THE BIFILAR MAGNET

43.4	43.1	42.9	43.5	44.0	44.0	43.5	43.2	43.0	42.0	42.0	41.4	41.0	40.5	41.15
47.0	46.5	47.0	47.0	46.2	46.0	45.9	45.7	45.6	45.6	45.7	45.4	45.2	45.0	44.75
49.5	49.5	49.3	49.0	49.0	49.3	49.3	49.7	49.8	49.8	49.6	49.2	49.0	48.9	48.33
51.0	51.5	51.2	51.8	53.0	52.6	52.2	51.6	50.8	50.1	50.3	49.8	49.5	49.5	51.17
51.0	51.0	50.4	50.4	50.0	49.5	48.8	48.1	47.2	47.0	45.6	45.2	44.5	44.1	48.69
47.0	46.3	46.3	46.7	46.9	47.2	47.8	48.4	—	—	—	—	—	—	46.37
53.0	53.0	52.6	52.5	52.0	51.5	51.5	51.5	51.1	50.9	50.7	50.4	50.2	—	50.76
54.0	54.0	53.8	53.4	53.0	53.1	52.7	51.8	51.3	51.2	49.8	48.6	49.2	48.2	51.83
55.4	55.6	55.3	54.8	54.2	54.0	53.4	52.6	52.2	52.0	51.7	51.2	51.2	51.0	52.70
54.0	53.6	53.5	53.6	53.5	53.2	53.4	53.2	53.3	53.5	53.5	54.1	55.0	55.0	53.40
54.8	55.5	55.6	55.8	56.2	56.4	56.4	56.2	55.8	55.6	55.6	55.1	55.0	54.8	55.27
54.3	54.0	53.5	53.0	52.4	52.4	51.7	51.4	—	—	—	—	—	—	51.70
47.5	48.0	47.9	47.5	47.5	47.3	47.0	46.8	46.5	46.2	45.8	45.4	45.0	44.9	46.75
49.7	50.5	50.6	49.8	49.2	48.5	47.8	47.4	47.0	46.2	46.4	46.4	47.0	45.0	46.59
52.4	52.2	52.0	52.7	53.0	53.3	53.9	54.0	54.0	53.6	53.5	53.2	53.0	53.5	50.56
56.3	56.0	56.0	56.0	56.0	55.4	55.0	54.5	54.2	53.5	53.1	52.6	52.5	52.0	54.53
57.0	57.2	55.6	55.7	55.7	55.1	54.5	54.5	53.7	53.2	52.8	52.7	53.0	52.6	54.45
51.8	52.5	52.5	51.5	51.1	50.6	50.0	49.7	—	—	—	—	—	—	49.85
53.2	52.8	52.6	52.0	51.6	51.4	51.4	51.6	51.6	51.3	51.6	52.0	52.5	52.2	51.55
52.7	52.0	52.0	51.6	51.6	51.6	51.8	51.9	51.5	51.0	50.7	51.4	51.8	51.7	51.96
53.4	54.0	54.2	54.2	54.0	53.1	52.5	52.5	52.2	51.6	51.5	51.5	51.5	51.4	52.35
53.6	53.2	53.0	52.5	52.2	52.4	52.0	52.4	52.4	52.0	51.7	51.5	51.5	51.4	52.20
52.5	52.5	52.1	51.8	52.1	52.0	52.2	51.8	51.6	51.6	51.2	51.2	51.2	50.5	51.69
52.0	52.0	51.8	51.7	52.0	51.8	51.2	51.0	—	—	—	—	—	—	49.87
49.6	49.6	49.8	47.4	49.4	48.8	48.7	48.4	48.2	48.0	48.0	47.8	48.1	48.4	48.64
50.2	50.2	52.3	50.4	50.5	49.9	49.7	49.7	49.1	48.5	48.0	47.5	46.5	46.2	49.40
51.90	51.90	51.81	51.53	51.40	51.17	50.93	50.75	49.81	49.55	49.33	49.20	49.19	48.93	50.25

* Three minutes late.

* Seven minutes late.

HORIZONTAL FORCE.													
One Scale Division = '00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Galvan. gen. Time.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.	10°.	11°.	
APRIL.	1	612.8	610.9	610.7	607.7	600.3	596.3	594.1	593.5	600.1	611.9	600.9	607.0
	2	609.9	608.1	607.5	612.8	607.7	601.7	602.4	602.0	601.0	608.0	611.0	613.5
	3	615.0	612.2	610.0	606.0	600.4	593.5	591.0	590.0	597.5	602.5	604.0	603.8
	4	606.0	611.6	612.5	607.0	591.0	586.0	581.0	581.6	592.0	610.4	598.6	601.2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	591.0	571.2	570.0	600.5	572.5	574.0	567.2	577.0	591.6	608.5	630.2	577.7
	7	584.6	580.0	575.0	575.6	572.9	574.2	573.6	570.0	578.8	583.5	587.8	585.2
	8	590.0	586.0	585.4	583.8	578.5	582.0	585.6	587.0	592.0	585.0	594.4	599.0
	9	600.8	599.0	595.0	588.5	582.5	578.9	581.4	587.0	591.0	601.0	602.0	602.8
	10 ^a	—	—	—	—	—	—	—	—	—	—	—	—
	11	602.0	595.2	595.3	595.4	598.2	591.0	597.2	589.5	597.2	598.2	595.0	599.8
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	605.8	612.8	602.4	599.4	599.0	583.8	576.2	578.9	596.0	616.0	594.5	609.0
	14	612.5	603.0	610.0	604.0	593.7	586.0	587.6	590.0	602.0	584.0	611.0	601.0
	15	608.0	603.7	594.0	593.2	581.2	586.0	588.8	595.7	598.6	604.4	612.4	605.2
	16	610.0	600.0	568.0	563.2	566.4	560.0	581.8	588.8	604.2	609.0	621.8	611.6
	17	595.2	593.4	589.0	582.4	585.0	583.2	575.0	579.4	592.0	608.2	604.5	604.0
	18	597.2	594.2	590.6	577.2	570.5	569.2	571.0	579.6	587.0	586.5	585.2	589.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	602.2	600.6	597.0	587.0	582.0	577.0	582.5	587.0	587.0	592.0	603.0	598.0
	21	597.6	599.0	594.0	585.0	577.5	574.0	575.0 ^b	580.3 ^c	585.2	589.4	589.6	589.2
	22	591.5	594.5	586.5	580.6	574.2	579.7	589.8	587.8	584.8	586.8	588.5	593.2
	23	593.8	592.6	588.0	574.2	570.5	571.4	576.1	580.8	585.0	597.8	594.2	598.0
	24	598.8	597.8	591.2	579.0	579.2	581.0	583.8	592.0	600.0	603.0	599.8	598.0
	25	586.0	586.1	583.5	577.9	576.0	582.0	578.9	582.0	585.0	577.0	596.0	584.2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	599.0	601.0	589.5	576.0	585.0	597.0	595.6	600.0	603.3	597.0	590.0	591.8
	28	595.0	590.0	583.0	578.2	580.0	584.6	586.3	590.2	591.4	593.8	587.9	593.0
	29	596.6	594.2	588.0	583.2	579.8	575.0	585.2	591.0	591.8	597.2	599.2	607.0
	30	596.8	592.0	583.8	575.2	582.0	583.8	588.6	591.0	588.0	596.0	593.4	589.0
Hourly Means		599.92	597.16	592.00	587.76	583.56	582.05	583.83	586.96	593.02	597.88	599.80	598.02
TEMPERATURE OF THE BIPOLAR MAGNET.													
APRIL.	1	45.7	45.4	45.8	46.8	48.4	49.2	49.4	49.9	50.5	51.6	52.0	51.9
	2	46.4	47.0	47.8	49.0	50.1	50.5	51.4	52.0	52.0	52.2	52.2	52.5
	3	46.9	47.5	49.0	50.0	51.8	52.5	52.7	53.0	53.0	53.9	54.5	54.8
	4	50.6	50.3	50.5	51.9	52.7	53.5	54.0	54.5	54.8	56.0	56.5	56.8
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	53.7	53.5	53.2	53.6	54.5	55.5	56.0	56.4	56.6	57.0	57.2	57.2
	7	54.5	54.0	54.0	54.4	54.9	55.0	55.2	56.5	56.5	57.0	56.8	56.9
	8	51.8	51.4	51.7	51.7	51.8	52.0	52.4	52.5	52.6	52.6	53.2	53.6
	9	48.6	49.5	50.1	51.0	52.4	52.5	52.4	53.0	53.0	54.0	54.5	54.3
	10 ^a	—	—	—	—	—	—	—	—	—	—	—	—
	11	49.6	49.4	49.0	49.2	50.1	51.0	52.0	53.4	53.5	53.5	53.0	52.9
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	44.2	44.3	44.4	45.2	46.2	45.7	45.5	45.4	45.4	46.4	47.4	47.7
	14	44.3	45.5	46.3	46.9	47.4	48.0	47.9	48.2	48.5	49.4	50.0	50.0
	15	48.5	48.5	48.5	49.0	49.6	49.5	49.5	49.6	49.8	50.4	51.0	51.5
	16	47.0	48.0	49.0	49.0	49.6	50.0	50.8	51.0	51.6	51.6	52.2	52.6
	17	50.0	50.3	51.0	52.2	53.9	55.2	55.8	56.5	56.7	57.0	57.5	57.4
	18	53.4	54.0	54.2	54.6	55.4	55.9	56.3	56.6	57.0	58.0	58.5	59.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	50.7	51.3	52.8	53.4	55.0	55.6	56.0	56.9	57.4	58.0	58.6	59.0
	21	57.0	57.2	57.5	58.7	59.6	60.7	61.4	62.2	63.0	64.0	64.3	64.2
	22	59.4	59.0	58.5	58.5	58.3	58.5	58.5	59.3	59.6	60.0	60.2	60.3
	23	59.6	59.5	59.7	60.0	60.8	60.7	61.0	61.2	61.2	61.3	61.3	60.6
	24	59.8	59.8	59.6	59.6	60.0	60.8	61.2	61.6	61.9	61.8	61.9	62.0
	25	60.4	60.0	59.5	58.8	58.4	58.4	58.6	59.0	58.6	58.5	58.6	58.2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	51.4	52.7	54.0	55.0	57.0	57.4	57.5	57.9	57.9	58.6	59.4	60.0
	28	56.5	57.4	58.0	58.2	58.6	59.4	59.6	59.8	59.8	60.0	60.2	60.3
	29	57.5	57.4	57.0	56.4	57.2	57.4	57.6	57.8	57.7	57.8	57.5	57.5
	30	57.2	56.7	57.8	57.8	58.7	59.2	59.8	60.5	61.2	61.8	62.0	62.0
Hourly Means		52.19	52.38	52.76	53.24	54.10	54.56	54.90	55.39	55.59	56.10	56.42	56.53

^a Good Friday.^b Two minutes late.^c Three minutes late.

HORIZONTAL FORCE.												
One Scale Division = 1/600000 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Baromet- ric Time.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.	10°.	11°.
1	593'0	591'2	581'6	575'0	577'0	575'2	578'8	586'4	591'0	591'2	591'0	593'4
2	593'5	592'1	583'8	573'0	571'0	578'5	587'0	591'0	592'2	592'0	589'4	584'2
3	—	—	—	—	—	—	—	—	—	—	—	—
4	586'0	585'2	576'5	562'2	515'0	572'2	576'3	595'6	575'8	588'4	621'0	597'5
5	570'0	566'0	563'0	561'8	561'6	565'2	561'8	573'0	581'8	581'2	587'8	593'0
6	577'0	579'2	574'2	570'2	562'8	566'4	571'0	575'8	587'0	590'0	579'8	582'0
7	580'5	580'6	576'0	573'0	571'4	561'5	567'5	576'5	579'0	593'5	573'0	593'0
8	582'0	581'0	580'0	575'3	563'8	562'0	567'0	574'0	591'4	590'8	591'0	587'8
9	581'0	579'0	561'0	561'4	571'0	580'0	589'4	592'2	603'2	606'4	588'2	573'6
10	—	—	—	—	—	—	—	—	—	—	—	—
11	591'0	590'2	590'6	589'2	588'0	590'0	587'6	592'0	610'0	608'0	603'0	601'5
12	600'9	578'6	579'8	517'4	561'4	580'2	578'8	580'0	616'5	603'5	660'0	637'5
13	578'0	579'4	573'0	568'2	569'0	568'5	571'5	591'0	585'0	597'0	582'0	583'2
14	572'0	563'2	567'0	553'0	560'0	558'0	559'5	570'0	581'4	582'6	582'4	582'4
15	570'0	567'0	561'0	556'2	561'0	566'0	569'2	577'2	578'8	579'8	579'0	582'8
16	589'0	581'8	583'2	568'8	570'0	573'5	577'2	581'4	586'2	590'6	587'8	575'0
17	—	—	—	—	—	—	—	—	—	—	—	—
18	588'2	590'0	581'8	574'6	568'2	570'0	571'0	584'2	600'0	602'0	598'5	602'5
19	602'0	598'0	590'2	587'7	586'7	592'0	591'4	600'0	587'0	600'0	608'0	598'2
20	581'5	595'5	587'0	586'0	580'0	596'0	602'0	610'8	620'0	598'0	601'8	595'4
21	587'0	588'2	584'0	566'7	575'8	581'0	587'4	592'8	609'6	601'8	600'5	592'4
22	586'6	581'0	573'2	575'8	578'5	583'2	579'2	578'8	589'2	591'0	591'0	597'0
23	606'0	600'5	581'8	573'4	551'6	548'2	582'5	590'0	591'0	588'4	590'8	592'0
24	—	—	—	—	—	—	—	—	—	—	—	—
25	566'5	572'8	561'0	517'5	562'8	571'0	569'5	569'6	585'0	583'6	581'0	582'2
26	583'5	583'0	576'0	567'0	563'0	566'6	572'0	572'8	581'2	581'4	581'0	585'2
27	578'0	576'0	568'0	561'8	561'4	566'4	575'2	571'8	580'6	576'2	572'8	576'2
28	577'2	573'4	574'5	562'0	550'5	516'8	555'6	566'8	572'4	575'8	577'6	578'0
29	583'5	577'0	571'8	566'4	562'0	563'9	567'0	572'8	577'5	580'0	582'5	588'0
30	578'0	567'2	566'0	551'2	560'2	555'2	551'2	551'2	562'2	575'0	581'0	594'2
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	583'92	581'66	575'85	567'84	566'90	570'67	575'10	581'57	589'19	590'32	592'30	591'08
TEMPERATURE OF THE DIAPHRAGM.												
1	59'9	60'2	60'6	61'0	61'0	61'0	61'4	62'0	62'0	62'0	62'0	62'0
2	61'2	61'2	61'9	62'1	63'4	64'0	61'0	61'2	61'2	61'6	63'2	65'4
3	—	—	—	—	—	—	—	—	—	—	—	—
4	59'0	59'5	60'5	61'3	62'7	63'5	63'8	61'2	61'8	65'4	66'0	66'7
5	60'0	60'0	60'4	60'8	61'3	61'8	62'2	62'2	62'3	63'0	63'4	63'8
6	61'0	61'0	61'5	62'5	63'0	63'3	63'2	63'5	63'2	63'0	63'0	63'0
7	57'2	57'8	58'0	58'8	59'5	60'2	60'5	61'0	61'0	61'4	61'5	61'5
8	58'6	59'5	60'4	62'4	63'4	63'5	61'0	61'5	61'4	61'6	61'6	61'0
9	62'0	62'0	62'0	61'8	61'6	61'8	61'8	62'0	61'6	61'8	62'0	62'0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	53'0	53'0	53'5	51'4	51'4	52'0	52'4	53'0	53'0	53'8	55'0	55'4
12	53'8	51'4	55'4	56'3	57'3	58'2	58'2	58'5	59'0	60'0	60'5	61'5
13	56'5	56'5	56'6	57'0	58'5	59'5	60'0	61'0	62'0	63'0	63'5	64'0
14	62'0	62'2	62'5	63'4	64'3	65'3	65'8	66'0	66'4	66'8	67'0	67'2
15	63'2	63'0	62'5	62'3	62'7	63'2	63'6	64'4	64'3	64'8	65'2	65'5
16	59'6	59'2	59'4	60'4	61'9	63'0	63'6	64'2	61'7	65'2	65'7	66'0
17	—	—	—	—	—	—	—	—	—	—	—	—
18	62'8	62'2	61'8	61'4	62'0	62'5	62'2	61'5	61'4	60'3	61'4	61'5
19	51'5	55'5	56'3	57'0	58'5	59'0	58'6	58'5	58'6	59'2	60'2	60'4
20	55'7	56'7	57'6	58'8	60'0	60'5	61'0	61'3	62'0	62'6	62'8	63'2
21	57'5	58'3	59'0	59'2	59'4	59'8	59'0	59'0	59'0	59'2	59'8	60'2
22	51'3	55'0	56'0	57'4	58'5	59'6	60'2	60'4	60'7	61'0	60'8	60'6
23	58'2	58'5	58'5	59'4	60'4	61'0	62'0	63'0	63'8	64'6	65'1	65'1
24	—	—	—	—	—	—	—	—	—	—	—	—
25	61'2	61'5	62'4	63'5	64'8	66'2	66'6	67'3	67'7	68'0	68'2	68'3
26	66'0	69'5	67'4	68'4	69'7	70'4	71'2	71'8	72'5	73'2	73'4	73'6
27	69'0	70'4	71'0	72'0	72'8	73'6	73'8	74'0	74'4	75'0	75'4	75'6
28	69'2	69'6	70'8	71'5	71'9	71'9	72'0	72'3	73'1	72'9	72'8	73'0
29	68'2	68'9	69'8	70'7	71'7	72'0	72'0	72'0	73'0	73'0	73'2	73'5
30	69'0	69'0	69'0	68'7	69'4	70'2	70'8	71'7	72'4	73'0	73'5	73'8
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	60'48	60'83	61'34	61'90	62'73	63'35	63'63	63'98	64'29	64'67	65'05	65'26

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
590°0	590°2	588°6	587°8	589°2	579°8	589°0	590°7	590°2	590°0	592°8	590°0	587°46
579°2	578°2	577°2	577°4	576°7	580°0	577°0	572°0	575°0	573°2	583°0	586°0	581°90
572°4	588°0	569°4	563°0	572°5	555°0	571°0	565°0	566°0	574°0	574°0	573°0	576°08
589°8	572°0	571°0	566°0	558°0	565°0	545°5	565°2	565°0	570°2	577°0	574°8	570°61
574°0	582°0	581°0	583°0	577°0	581°2	579°6	580°8	583°6	580°4	576°2	578°5	578°12
588°2	584°7	579°6	582°2	583°4	570°2	585°2	578°6	593°2	589°2	590°0	591°2	581°04
573°8	569°8	573°8	575°4	574°0	566°0	575°4	583°9	584°0	584°0	583°5	587°0	578°20
582°4	584°2	576°4	575°5	575°4	576°2	588°5	590°0	591°5	591°5	590°4	588°2	583°19
601°8	604°0	602°0	595°7	572°0	590°0	599°0	581°0	590°2	581°4	574°3	523°3	589°95
585°7	581°0	575°0	580°2	575°0	581°2	568°0	586°4	581°2	585°0	573°8	565°5	586°78
597°0	585°6	567°8	576°8	571°2	570°0	575°0	573°0	575°7	573°5	574°6	578°5	577°94
597°8	577°6	571°2	568°0	562°0	567°6	566°0	568°7	568°2	571°4	573°0	573°0	570°67
582°4	581°0	578°0	577°0	578°0	580°2	580°0	581°0	583°0	583°0	583°0	588°2	575°80
576°0	576°0	577°1	581°0	583°0	583°0	585°0	585°0	583°2	588°0	587°2	587°4	581°64
599°0	576°0	600°0	584°3	584°0	587°2	565°0	582°4	600°8	599°6	595°4	601°4	587°75
594°0	596°0	596°2	590°4	583°8	580°4	559°2	584°6	593°0	584°8	587°0	593°2	591°20
590°4	589°2	588°2	584°5	584°0	586°8	590°2	586°2	592°0	591°4	583°0	586°0	591°91
589°0	588°6	587°4	590°0	592°0	590°0	592°5	591°0	587°0	590°0	587°0	578°2	588°75
590°0	590°7	591°8	593°0	590°0	594°0	595°0	593°2	590°0	586°2	600°0	597°4	588°66
591°0	586°0	586°0	583°2	582°0	583°2	562°0	583°4	578°4	585°4	587°0	572°0	582°49
585°0	583°7	578°0	578°4	576°8	573°2	579°4	578°0	578°8	576°8	574°5	577°0	574°88
586°4	586°0	571°8	566°5	574°5	570°8	570°0	570°0	570°0	572°2	578°0	576°0	575°58
576°0	571°8	570°0	568°0	569°0	567°0	565°3	569°0	570°0	569°0	573°0	578°4	571°41
572°8	576°2	574°0	571°0	571°0	571°0	571°8	570°8	572°4	575°6	577°4	579°0	570°40
577°6	578°0	576°5	575°2	578°0	578°2	580°0	569°2	569°4	570°4	571°0	572°6	573°87
582°5	588°0	570°2	570°4	568°0	551°4	557°8	573°2	556°0	553°8	568°0	558°7	566°5
581°0	594°2	—	—	—	—	—	—	—	—	—	—	567°5
583°14	582°27	579°79	578°00	576°97	576°59	575°16	578°25	581°13	580°66	581°10	579°45	580°05

TEMPERATURE OF THE BIPOLAR MAGNET.

62°0	62°0	61°8	61°7	61°5	61°4	61°3	61°6	62°0	61°8	61°8	61°7	61°4	61°47
65°2	65°4	65°4	65°4	65°1	65°3	65°0	—	—	—	—	—	—	63°37
66°0	66°7	66°5	66°5	65°8	65°5	61°8	64°5	63°2	62°5	61°4	60°8	59°5	63°64
63°4	63°8	64°0	63°6	63°5	63°0	62°5	62°3	61°8	61°8	61°8	61°5	61°3	62°18
63°0	63°0	62°7	62°5	62°0	61°6	60°8	60°4	60°0	59°2	58°6	58°0	57°6	61°57
61°5	61°5	60°8	60°8	60°6	60°0	59°6	59°2	59°0	58°5	58°5	58°5	58°4	59°74
61°6	61°0	63°8	63°6	63°4	63°0	63°0	62°5	62°7	62°5	62°5	62°4	62°5	62°82
62°0	62°0	61°8	62°0	62°2	62°4	62°5	62°7	—	—	—	—	—	60°30
55°0	55°4	56°4	56°2	56°0	55°0	54°5	54°2	54°0	53°8	53°8	53°4	53°4	53°82
60°5	61°5	62°0	62°0	61°5	61°2	60°6	60°0	59°2	58°6	58°2	57°6	57°0	58°68
63°5	64°0	64°4	64°0	63°6	63°4	62°8	62°4	62°4	62°7	62°7	62°5	62°2	61°41
67°0	67°2	66°6	66°2	66°0	65°7	65°4	65°2	65°0	65°0	65°0	64°9	64°0	65°20
65°5	65°0	64°6	64°6	63°5	63°4	62°9	62°5	62°0	61°4	61°0	60°5	59°7	63°20
65°2	65°5	65°9	65°9	65°4	64°8	64°2	63°5	—	—	—	—	—	63°58
65°7	66°0	—	—	—	—	—	64°5	64°5	63°8	63°6	63°4	63°5	63°58
61°4	61°5	60°5	59°5	59°2	58°8	58°8	58°2	57°2	56°3	55°6	55°2	54°6	59°85
60°2	60°4	60°0	59°5	58°8	58°4	58°0	57°8	57°2	56°9	56°5	56°2	55°4	57°97
62°8	63°2	63°2	62°8	62°5	62°0	61°4	60°7	59°8	59°4	58°7	58°4	57°4	60°50
59°8	60°2	59°7	59°2	58°9	58°4	58°0	57°4	56°5	56°0	55°4	55°0	54°3	58°28
60°8	60°6	60°2	59°8	59°4	59°0	58°7	58°5	58°0	57°7	57°5	57°2	57°2	58°54
65°1	65°1	65°0	64°5	64°5	64°5	64°5	—	—	—	—	—	—	62°47
68°2	68°3	68°0	68°5	68°4	68°2	68°0	67°6	67°0	66°9	66°5	66°3	66°0	66°46
73°4	73°6	73°6	72°6	72°1	71°7	71°3	70°8	70°3	70°0	69°7	69°1	69°0	70°75
75°4	75°6	75°7	75°7	75°4	74°6	74°0	73°4	73°1	71°5	71°0	70°5	70°0	73°00
73°0	73°0	73°5	72°7	72°4	72°0	71°5	70°6	70°4	70°0	69°6	69°2	68°0	71°41
72°8	73°0	72°1	72°0	71°4	71°4	71°0	70°8	70°6	70°4	70°2	70°0	69°5	71°14
73°2	73°5	73°8	72°5	72°3	72°1	71°6	—	—	—	—	—	—	71°21
65°05	65°26	65°07	64°67	64°30	63°97	63°59	62°95	62°50	62°12	61°76	61°46	61°05	63°18

* Twenty minutes lat.

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
JUNE.	1	Sc. Div. 572'3	Sc. Div. 563'5	Sc. Div. 567'3	Sc. Div. 566'0	Sc. Div. 555'4	Sc. Div. 565'0	Sc. Div. 558'2	Sc. Div. 572'2	Sc. Div. 575'2	Sc. Div. 576'2	Sc. Div. 577'2	Sc. Div. 584'2
	2	570'0	567'0	563'0	565'6	560'8	561'6	560'1	556'8	576'2	581'8	589'8	606'5
	3	573'8	569'0	564'2	563'8	561'0	565'6	566'2	566'5	571'8	574'2	575'4	588'0
	4	571'4	571'2	559'8	560'8	557'8	553'5	560'0	566'0	580'4	578'0	576'0	578'0
	5	572'4	575'4	576'5	574'5	570'0	568'7	570'0	563'0	577'0	576'5	587'0	589'0
	6	588'9	588'0	580'8	576'5	578'0	581'0	581'0	592'2	598'0	594'6	604'0	599'8
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	597'0	592'0	587'0	578'8	573'4	571'6	577'0	580'6	580'0	586'4	588'5	598'6
	9	586'6	581'2	572'8	566'2	559'6	561'8	563'8	583'5	586'0	586'0	587'2	593'0
	10	581'2	582'2	584'2	575'2	565'2	568'0	568'2	573'2	575'0	573'0	582'2	582'8
	11	578'8	576'8	575'8	575'8	574'7	573'5	570'8	573'0	578'0	586'0	588'5	590'0
	12	582'5	583'0	579'2	574'0	574'0	580'0	578'2	580'0	576'2	580'2	590'0	591'8
	13	604'0	589'0	592'5	590'7	587'0	581'7	591'4	591'4	591'2	593'4	597'0	591'6
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	574'8	572'2	576'0	580'0	564'5	544'5	574'8	573'5	572'4	591'0	590'8	595'0
	16	567'8	566'6	577'8	552'0	568'0	570'6	576'6	572'2	572'2	576'0	587'0	570'9
	17	577'2	579'5	574'8	571'5	563'0	560'0	572'0	571'0	592'0	589'0	589'0	576'4
	18	574'0	577'0	568'5	565'2	567'0	572'2	574'0	579'4	581'0	579'0	586'6	586'0
	19	568'5	569'0	562'5	555'0	553'4	561'6	572'6	579'8	586'7	586'8	583'1	574'0
	20	576'4	575'0	571'2	569'4	565'5	563'8	561'2	564'0	569'2	576'8	578'2	583'3
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	599'8	597'4	587'6	596'2	567'8	580'8	590'0	591'0	591'0	596'6	586'5	596'0
	23	597'2	594'2	585'5	576'0	573'6	570'2	588'0	575'5	590'5	593'5	578'0	590'0
	24	584'0	583'7	573'6	574'5	572'5	576'0	583'0	589'2	601'2	597'0	587'2	584'6
	25	578'6	576'0	566'6	569'0	575'0	569'8	578'0	583'2	580'2	579'2	576'0	574'6
	26	576'0	573'2	572'2	568'2	566'6	567'5	569'0	569'2	579'0	588'4	570'8	571'3
	27	576'4	571'2	571'8	566'8	562'0	560'4	558'0	559'8	569'5	575'0	569'5	577'0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	575'8	572'0	565'2	566'2	562'7	567'4	573'2	563'5	580'0	589'2	568'0	571'2
	30	569'2	571'0	568'4	559'0	554'8	547'2	557'8	554'3	571'0	571'2	574'0	574'0
Hourly Means	579'79	577'17	574'03	570'65	566'67	567'08	571'79	574'17	580'80	583'65	583'37	585'29	583'97
TEMPERATURE OF THE BIFILAR MAGNET.													
JUNE.	1	68'5	69'5	70'0	70'5	69'8	70'6	70'8	71'0	71'5	72'0	72'6	73'0
	2	69'4	69'2	69'0	69'5	69'8	70'0	70'0	69'8	70'0	70'0	70'2	70'0
	3	65'5	66'3	66'7	67'2	67'3	67'5	67'6	67'5	67'6	68'2	68'9	69'4
	4	66'4	67'0	67'4	67'5	67'8	68'1	68'7	69'4	69'4	69'5	69'4	69'0
	5	65'4	65'2	65'0	64'9	64'5	64'4	64'4	64'9	65'0	65'0	65'7	65'7
	6	61'1	61'2	62'0	62'9	63'6	63'5	63'7	63'7	64'0	64'5	64'5	65'0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	58'5	59'0	60'1	61'3	62'7	63'7	64'2	64'6	65'2	65'8	66'4	66'7
	9	60'0	60'5	61'2	62'2	64'0	65'4	65'7	66'1	66'5	67'2	67'7	68'3
	10	62'6	63'2	64'3	65'2	66'4	66'7	67'2	67'8	68'9	70'0	70'5	71'0
	11	65'5	65'7	66'0	66'4	68'0	68'6	68'7	69'0	68'5	68'5	69'2	69'2
	12	63'6	64'2	65'0	65'9	66'0	66'7	67'0	67'0	67'2	67'2	67'0	67'4
	13	63'2	64'0	64'5	65'2	66'4	67'2	67'5	67'9	68'1	68'3	68'4	68'2
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	66'2	66'5	67'0	68'4	69'9	70'8	71'2	71'7	72'2	73'0	73'8	74'2
	16	69'4	69'4	69'8	70'2	71'0	71'4	71'2	71'2	71'4	71'5	71'8	72'0
	17	67'1	67'4	68'2	68'8	69'7	70'3	71'0	71'5	72'4	73'5	74'0	74'4
	18	69'5	69'4	69'5	70'0	71'2	71'8	72'6	73'4	73'8	74'0	74'5	74'6
	19	71'5	71'6	71'6	71'7	72'0	72'6	73'5	74'5	75'4	76'5	76'7	77'0
	20	70'6	70'4	70'2	69'8	69'6	70'0	70'2	70'2	70'0	69'8	69'5	69'0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	59'2	59'0	59'4	60'5	61'7	62'8	63'5	64'0	64'4	64'8	65'2	65'0
	23	61'5	61'2	61'9	62'7	64'8	66'0	66'9	68'0	68'4	69'5	70'3	70'5
	24	65'0	65'3	66'0	67'0	67'9	68'7	70'0	70'7	71'7	72'0	73'3	73'8
	25	68'7	69'0	69'8	70'8	71'7	73'2	73'8	75'0	75'7	76'4	76'5	77'0
	26	70'8	70'5	70'7	70'6	71'4	72'5	73'2	74'0	74'5	75'5	76'0	76'2
	27	72'0	71'8	72'0	72'0	72'2	73'0	73'6	73'8	74'0	74'0	74'0	74'0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	71'5	71'5	71'5	71'5	71'4	73'4	74'4	75'0	75'5	76'0	76'4	76'8
	30	73'3	74'0	74'7	75'7	76'9	77'5	77'8	78'2	78'3	78'7	79'0	79'5
Hourly Means	66'38	66'62	67'06	67'63	68'37	69'08	69'55	70'00	70'37	70'82	71'21	71'43	71'45

re, 1' 63.

10h.	11h.
Sc. Div.	Sc. Div.
577'2	584'2
589'8	606'5
575'4	588'0
576'0	578'0
587'0	589'0
604'0	599'8
588'5	598'6
587'2	593'0
582'2	582'8
588'5	590'0
590'0	591'8
597'0	591'6
590'8	595'0
587'0	570'9
589'0	576'4
586'6	586'0
583'1	574'0
578'2	583'3
586'5	596'0
578'0	590'0
587'2	584'6
576'0	574'6
570'8	571'3
569'5	577'0
568'0	571'2
574'0	574'0
583'37	585'29

72'6	73'2
70'2	70'0
68'9	69'4
69'4	69'0
65'7	65'7
64'5	65'0
66'4	66'7
67'7	68'3
70'5	71'0
69'2	69'2
67'0	67'4
68'4	68'2
73'8	74'2
71'8	72'0
74'0	74'4
74'5	74'6
76'7	77'2
69'5	69'0
65'2	65'0
70'3	70'5
73'3	73'8
76'5	77'0
76'0	76'2
74'0	74'0
76'4	76'8
79'0	79'5
71'21	71'43

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
577'2	574'8	570'2	544'5	532'4	548'2	531'8	515'2	552'2	555'0	550'0	565'0	561'58
589'8	569'2	561'0	555'2	546'0	549'0	550'0	565'0	558'0	570'0	575'6	576'0	568'24
575'4	587'2	571'0	572'0	574'0	571'2	573'0	572'2	574'6	573'2	572'0	578'4	572'64
576'0	574'0	574'0	579'0	576'8	573'2	571'8	570'0	565'7	563'8	575'2	575'6	570'33
590'2	584'3	581'6	586'2	588'5	569'8	568'0	581'0	587'1	584'2	589'0	589'2	579'13
598'2	594'8	581'2	572'8	574'0	574'7	587'0	585'8	588'0	588'2	590'8	594'0	587'18
606'8	606'5	595'0	580'0	576'0	572'5	571'0	558'0	581'0	559'0	586'0	590'8	583'06
592'0	573'5	575'0	558'5	560'0	553'0	569'0	572'0	574'3	575'2	574'3	577'5	574'25
588'0	580'5	577'0	579'0	576'2	573'0	572'4	574'2	576'8	578'4	579'0	576'4	576'72
589'2	584'3	580'2	573'4	576'5	577'4	579'8	579'8	579'2	577'2	575'5	577'0	578'76
585'8	581'8	582'4	582'8	585'4	587'0	596'0	590'0	590'2	594'0	594'0	601'0	584'98
588'0	588'2	578'2	574'8	575'6	575'5	574'5	577'0	584'0	574'5	575'0	583'2	585'39
579'0	582'2	566'3	561'5	560'0	561'8	570'0	566'0	574'6	570'0	568'0	577'0	572'75
586'0	589'0	570'0	566'0	582'6	575'0	572'2	571'0	578'8	572'0	557'8	580'6	572'77
598'0	573'2	570'0	570'0	571'8	572'8	575'0	577'0	573'5	576'5	574'0	574'0	574'63
584'2	569'2	574'0	560'5	559'4	565'8	564'0	544'5	560'0	569'2	569'0	566'0	570'65
571'4	566'0	568'0	568'0	566'0	567'0	567'2	568'0	567'0	567'0	571'0	573'2	569'70
582'0	582'0	581'0	579'0	581'0	576'0	596'0	599'8	590'4	583'7	578'2	598'8	578'41
603'0	604'0	575'0	569'2	581'4	585'0	587'4	589'4	591'0	586'8	592'4	582'4	588'65
590'2	591'0	581'2	577'2	582'2	578'6	580'4	585'4	584'8	583'5	581'2	582'0	583'75
571'0	575'6	575'8	575'2	577'6	578'5	577'8	579'0	581'0	579'0	584'0	585'6	581'11
576'0	561'6	567'5	564'7	566'8	567'4	572'0	574'0	572'0	571'0	572'2	576'0	572'81
574'0	579'0	581'8	571'0	570'2	576'0	579'0	571'5	570'2	569'0	575'3	573'8	573'42
581'0	581'0	578'0	570'0	574'6	574'0	556'8	573'8	569'2	565'4	576'2	575'0	570'52
577'0	577'2	571'0	553'8	559'2	556'4	557'2	560'8	565'6	568'5	560'0	565'2	567'80
563'0	569'8	565'2	565'0	567'6	560'7	558'0	560'0	567'2	568'5	566'4	578'5	565'05
583'97	580'77	575'06	569'63	570'84	569'98	571'43	572'71	575'28	573'90	575'47	579'70	575'55

TEMPERATURE OF THE BIPOLAR MAGNET.

75'0	72'8	72'4	72'2	72'1	71'6	71'3	70'9	70'5	70'3	69'9	69'4	71'10
70'2	69'6	69'2	69'0	68'5	68'0	67'8	67'3	66'8	66'5	66'0	65'5	68'80
69'6	69'4	69'0	69'0	68'6	68'4	68'0	67'8	67'6	67'2	67'0	66'6	67'83
68'5	68'4	68'0	67'8	67'6	67'4	67'0	67'0	66'6	66'4	66'0	65'8	67'75
65'5	65'3	65'2	64'8	64'5	64'2	63'5	62'6	62'2	62'0	61'5	61'3	64'29
64'5	64'2	64'0	63'2	62'7	62'2	60'3	60'0	59'8	59'5	59'0	58'6	62'40
66'5	66'5	66'0	65'5	64'8	64'2	63'7	62'5	62'0	61'2	60'6	59'8	63'40
68'4	68'6	68'5	67'6	67'0	66'0	65'6	64'6	64'0	63'4	63'2	62'4	65'17
71'0	71'0	70'4	69'6	69'4	68'7	68'5	67'6	67'2	66'5	66'5	65'6	67'74
69'2	69'2	68'7	68'6	68'0	67'6	67'0	66'0	65'5	64'8	64'2	63'5	67'32
67'6	67'4	66'6	66'2	65'7	65'1	64'7	64'1	64'0	63'5	63'4	63'0	65'65
68'0	67'5	67'1	66'6	66'4	66'0	68'0	67'6	67'0	66'6	66'6	66'3	66'77
74'6	74'4	73'6	73'0	72'5	72'0	71'5	71'0	70'8	70'0	69'0	69'0	71'10
72'2	72'0	71'5	71'3	70'7	70'2	70'0	69'2	68'6	68'2	67'6	67'2	70'37
74'6	74'6	74'0	73'4	73'0	72'4	72'0	71'4	71'0	70'8	70'3	70'0	71'49
74'8	75'2	74'8	74'5	74'2	73'8	73'5	73'0	72'6	72'3	72'0	71'5	72'77
77'0	76'5	75'8	75'2	75'0	74'5	74'1	73'0	72'5	72'0	71'5	71'0	73'87
69'0	68'2	67'6	67'0	66'5	66'0	60'3	60'4	60'2	60'0	59'7	59'2	66'81
64'7	64'5	64'4	64'0	64'0	63'8	63'5	63'1	63'0	62'5	62'0	61'7	62'95
70'5	70'5	69'8	69'4	68'6	68'0	67'4	66'7	66'5	66'0	65'6	65'0	66'90
73'9	73'8	73'0	72'5	72'1	71'9	71'4	70'6	70'4	69'6	69'3	68'7	70'36
77'0	76'5	76'0	75'5	75'0	74'7	74'3	73'9	73'0	72'5	71'9	71'5	73'29
76'6	76'8	75'8	75'4	75'0	74'7	74'5	74'0	73'6	73'5	73'2	72'5	75'81
74'0	73'5	73'0	73'0	72'7	72'5	73'3	73'0	72'7	72'4	72'0	71'7	72'93
77'0	77'0	77'0	76'4	76'0	75'4	75'0	74'4	74'0	73'7	73'2	73'0	74'46
79'5	79'5	78'7	78'2	78'0	77'6	77'2	77'0	76'2	75'4	74'8	74'6	77'10
71'45	71'27	70'77	70'34	69'95	69'50	68'96	68'58	67'99	67'55	67'14	66'69	69'10

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Götting- Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JULY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	1 568'5	568'0	570'0	571'6	565'0	554'8	557'4	561'5	562'5	563'2	565'1	579'5
	2 561'0	571'4	563'2	551'8	552'8	550'0	567'2	563'0	564'4	571'0	576'5	576'0
	3 557'5	570'2	567'8	559'4	561'0	571'0	577'8	572'0	574'2	561'1	578'8	579'0
	4 554'6	542'6	560'9	568'9	569'0	570'0	574'2	582'0	584'0	580'0	583'0	586'0
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 561'5	570'8	556'0	561'0	555'2	554'0	537'5	568'2	567'0	573'2	581'0	593'2
	7 569'0	570'0	558'0	550'0	560'8	562'0	560'6	581'0	580'4	571'8	569'2	573'2
	8 571'4	576'2	568'8	567'5	566'0	561'8	560'5	579'2	572'0	578'4	586'0	581'0
	9 568'0	569'0	568'0	564'4	551'0	557'3	561'2	563'6	565'0	562'4	569'8	582'6
	10 574'6	570'2	571'0	568'3	564'0	564'2	559'0	566'4	565'3	569'4	570'8	559'4
	11 582'2	575'4	558'6	558'8	565'5	573'5	551'0	547'2	536'5	562'0	579'5	576'0
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 571'4	570'8	577'2	579'2	573'5	558'8	558'4	563'8	578'4	587'0	590'0	580'2
	14 575'2	566'8	569'2	568'4	565'0	568'2	571'8	577'4	589'0	592'6	575'0	590'0
	15 586'2	587'8	584'6	578'0	569'2	575'0	580'4	589'0	583'0	589'0	594'0	596'0
	16 585'6	586'0	588'0	577'0	563'5	576'0	580'6	583'0	593'0	586'5	591'0	590'8
	17 587'4	585'0	583'5	573'0	579'0	576'0	580'0	593'2	593'0	599'4	598'2	593'2
	18 582'2	582'0	572'0	572'8	562'0	566'2	567'0	591'8	592'2	600'8	614'2	578'0
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 580'6	583'0	582'0	570'0	557'0	570'6	576'2	579'4	580'6	576'0	580'0	580'4
	21 579'2	567'8	572'8	573'9	571'7	571'5	572'2	568'8	572'0	579'0	574'8	577'0
	22 572'0	569'8	567'6	566'0	561'5	564'2	568'0	571'5	580'5	588'0	584'8	581'2
	23 585'4	587'2	580'4	559'5	564'5	565'5	574'0	572'0	571'5	572'0	577'5	581'0
	24 581'2	580'0	576'2	569'8	553'0	563'5	571'8	575'6	565'7	568'8	595'2	586'0
	25 582'4	566'0	573'8	562'7	557'0	565'4	576'5	581'0	596'5	577'2	580'4	586'0
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 578'4	580'0	568'6	562'0	552'0	554'0	562'0	564'0	573'4	583'0	569'0	575'0
	28 578'6	578'5	571'0	575'7	568'6	568'2	578'7	578'5	584'0	584'0	585'0	583'2
	29 573'4	573'0	575'5	565'0	549'8	562'5	542'5	572'0	582'0	590'0	575'8	563'6
	30 549'5	557'0	570'0	564'0	548'2	552'0	561'8	556'2	571'4	584'8	566'4	592'0
	31 574'0	571'8	554'8	568'5	545'8	540'4	544'6	568'2	587'0	583'6	591'0	594'0
Hourly Means	573'74	573'20	570'83	567'04	561'28	563'58	565'66	572'94	576'76	578'79	581'30	581'98
TEMPERATURE OF THE RUSSIAN MAGNET.												
JULY.	1 71'5	75'5	76'1	77'2	78'2	78'7	78'8	79'2	79'4	79'6	79'5	79'3
	2 73'8	74'3	74'8	75'4	75'8	76'5	76'6	76'6	77'0	76'8	77'0	77'0
	3 71'8	72'4	73'2	74'2	75'0	75'5	75'5	75'6	75'8	76'0	75'9	76'0
	4 69'8	70'5	71'2	72'0	73'0	74'0	75'0	75'5	76'0	76'8	77'5	77'5
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 74'0	74'5	75'0	75'9	76'2	76'2	76'4	76'8	77'3	78'3	79'4	79'5
	7 72'8	72'4	72'8	73'3	74'0	74'7	74'8	75'0	75'4	75'4	76'0	76'3
	8 70'4	70'0	70'0	70'0	70'2	71'0	71'2	71'8	72'6	74'2	75'1	75'6
	9 72'0	72'5	73'2	73'8	74'8	75'3	75'3	75'0	74'8	75'2	75'6	76'4
	10 75'3	76'4	77'5	78'6	80'2	82'0	83'2	83'2	83'2	83'8	84'5	85'0
	11 78'0	78'4	78'6	79'0	80'0	81'4	81'7	82'5	82'3	81'5	81'2	81'4
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 72'7	73'0	73'7	74'4	74'4	74'6	74'6	74'6	75'0	75'4	75'8	76'2
	14 69'5	69'6	70'3	70'4	70'8	70'8	70'7	70'7	71'0	71'0	70'9	70'5
	15 65'1	64'8	65'4	66'0	66'4	66'7	66'8	67'0	67'0	67'2	67'4	68'0
	16 64'0	64'8	65'4	65'8	66'2	66'5	66'7	66'9	67'2	67'5	67'7	68'0
	17 63'7	64'4	65'8	67'0	68'0	68'5	69'0	69'2	69'2	70'6	71'0	71'1
	18 65'6	66'5	67'4	68'2	69'0	70'0	70'2	71'0	71'5	72'1	72'4	72'6
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 72'0	71'7	72'0	72'4	73'0	74'2	74'6	75'2	75'6	76'0	76'6	77'0
	21 72'2	72'3	73'4	74'5	75'0	76'0	76'8	77'0	77'4	77'6	77'6	77'6
	22 72'9	72'5	72'5	72'7	73'0	73'4	73'9	74'2	74'5	75'0	75'5	75'6
	23 71'5	72'2	73'0	73'8	74'6	75'0	75'5	76'0	76'5	77'0	77'3	77'4
	24 73'7	73'7	73'5	73'2	73'0	73'6	73'0	72'9	72'7	73'2	73'3	73'5
	25 70'6	71'4	71'8	72'0	73'7	74'5	74'9	75'5	76'4	76'7	77'3	77'4
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 71'6	72'2	72'6	73'0	74'8	75'0	75'0	74'9	75'5	75'7	75'9	76'0
	28 70'5	71'2	71'5	72'5	73'0	73'7	74'7	75'0	75'5	76'0	76'5	76'2
	29 73'0	74'0	74'5	75'4	76'1	77'4	78'4	78'7	79'2	80'3	80'3	80'0
	30 77'0	77'5	77'7	78'5	79'0	79'6	79'8	80'5	81'2	81'8	82'2	82'0
	31 76'3	76'0	75'6	76'0	76'4	77'2	77'8	77'6	77'8	78'5	79'0	79'0
Hourly Means	71'64	72'03	72'54	73'15	73'84	74'52	74'85	75'11	75'41	75'86	76'24	76'39

* Four minutes late.

1° 63.

00°. 11°.

Sc. Div.	Sc. Div.
579°5	579°5
579°5	579°5
579°5	579°5
579°5	579°5

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579°5	579°5
579°5	579°5
579°5	579°5
579°5	579°5

HORIZONTAL FORCE.
One Scale Division = 1/1000000 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
582°4	588°8	556°2	560°5	563°0	565°5	568°8	565°0	565°0	545°0	558°0	557°2	564°27
564°5	566°0	554°0	562°5	549°0	555°5	563°0	548°0	552°2	554°3	555°0	563°0	560°76
584°2	571°0	563°0	552°2	547°0	530°2	534°3	582°8	568°2	549°8	550°5	554°0	563°33
596°2	594°4	574°2	571°4	587°6	584°4	—	—	—	—	—	—	572°50
—	—	—	—	—	—	561°5	568°0	559°0	561°8	566°4	554°0	563°10
571°4	563°5	565°2	556°8	556°6	551°2	561°0	557°0	560°2	561°4	561°0	561°5	565°69
572°0	572°4	561°8	560°1	560°0	558°5	558°0	565°0	564°8	566°4	567°2	564°4	569°77
568°0	570°0	569°0	573°2	566°3	570°0	567°0	561°0	565°0	562°3	567°5	566°5	567°40
579°2	575°4	570°8	568°8	568°2	563°8	563°4	568°4	566°0	570°2	566°6	571°4	566°80
561°8	565°0	554°0	561°4	559°0	561°8	564°8	590°8	561°7	566°0	570°2	580°0	562°06
564°0	559°0	554°4	551°2	556°2	567°0	—	—	—	—	—	—	568°62
—	—	—	—	—	—	558°0	560°4	567°6	562°0	579°0	574°4	578°91
574°5	576°0	560°8	562°8	563°6	567°0	567°2	568°0	563°0	557°0	548°0	550°2	568°62
585°0	582°0	580°6	579°0	581°0	581°0	560°0	593°7	592°0	588°4	587°2	575°4	578°91
589°0	587°0	585°0	583°2	582°0	580°4	579°3	586°4	585°0	593°8	586°4	588°0	582°69
587°0	580°0	579°3	578°8	585°8	583°6	585°8	587°0	592°0	580°5	577°4	584°0	584°50
581°0	579°0	579°2	582°6	583°6	581°7	583°4	583°4	587°0	580°5	581°8	581°0	578°74
573°5	571°4	578°0	581°5	584°0	580°8	—	—	—	—	—	—	573°35
—	—	—	—	—	—	574°0	577°0	552°0	581°5	574°8	577°0	570°43
579°0	575°5	562°5	572°0	568°0	565°0	570°0	572°4	570°6	571°0	568°2	570°4	575°56
572°5	572°0	572°5	574°0	573°2	568°4	566°2	550°0	562°2	563°7	575°0	570°0	575°42
579°8	577°8	579°6	578°8	581°8	580°9	582°0	581°0	582°0	578°0	559°7	577°0	572°91
582°0	584°4	575°4	574°0	575°0	575°0	573°2	573°5	574°5	576°0	577°5	579°0	574°77
596°0	589°0	580°0	576°0	575°0	571°0	568°0	—	—	—	—	—	569°87
569°0	570°5	573°2	571°0	572°0	572°4	—	—	—	—	—	—	578°23
—	—	—	—	—	—	577°0	576°3	579°4	575°2	576°3	577°2	566°98
574°0	582°0	563°2	561°2	563°6	566°4	564°0	573°2	578°6	582°2	578°0	579°0	562°07
572°4	575°0	575°2	577°4	578°2	580°0	576°0	588°0	581°4	577°0	576°0	576°0	568°00
569°0	564°4	555°8	562°0	563°5	565°0	567°2	568°5	568°0	562°9	570°0	566°0	568°00
555°8	556°0	561°0	569°0	563°9	548°0	550°0	560°0	566°0	567°0	561°5	568°2	568°00
563°0	569°0	552°8	571°8	563°5	567°0	560°8	574°2	570°0	566°2	576°0	574°0	571°16
575°91	573°94	567°29	569°60	569°28	567°25	566°55	571°74	570°29	568°11	569°68	571°08	571°16

TEMPERATURE OF THE BIPOLAR MAGNET.

79°5	79°3	79°0	78°3	77°7	77°4	77°0	76°6	76°2	75°5	75°0	74°5	74°2	73°7	73°13
77°0	77°0	76°0	75°8	75°2	75°0	74°0	73°8	73°2	73°0	72°2	71°6	70°8	70°4	70°0
75°9	75°9	75°0	74°8	74°2	74°0	73°0	72°8	72°2	71°6	71°0	70°4	69°8	69°2	68°6
73°5	73°5	72°5	72°0	71°8	71°4	70°8	70°2	69°6	69°0	68°4	67°8	67°2	66°6	66°0
79°4	79°5	79°3	78°5	77°8	77°2	76°9	76°3	75°7	75°0	74°5	74°2	73°9	73°0	72°13
76°0	76°3	76°0	75°0	74°8	74°6	73°8	73°1	72°3	72°0	71°8	71°6	71°2	70°8	70°4
75°1	75°6	75°6	75°8	75°9	75°3	74°8	74°2	73°8	73°6	73°2	72°8	72°6	72°0	71°5
75°6	76°4	76°4	77°0	77°2	76°8	76°6	76°2	75°8	75°8	75°5	75°2	75°0	74°6	74°2
84°5	85°0	84°0	83°4	82°5	81°6	81°0	80°7	80°2	79°7	79°0	79°0	78°6	78°2	77°8
81°2	81°4	80°4	80°4	80°5	80°2	80°0	—	—	—	—	—	—	—	—
75°8	76°2	76°0	75°5	75°0	74°7	74°2	73°8	73°2	72°7	72°1	71°5	71°0	70°6	70°2
70°9	70°5	69°6	69°0	68°6	68°2	67°6	67°0	66°7	66°5	66°0	65°5	65°2	64°8	64°4
67°4	68°0	68°0	67°5	67°0	66°6	66°4	66°0	65°4	65°0	64°6	64°4	64°1	63°8	63°4
67°7	68°0	68°5	68°5	68°2	67°3	66°8	66°2	65°5	65°0	64°6	64°4	64°1	63°8	63°4
71°0	71°1	71°0	70°8	70°2	69°6	69°1	68°5	68°0	67°4	67°0	66°6	66°2	65°8	65°4
72°4	72°6	72°7	72°6	72°0	71°5	71°1	70°9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	72°0	72°0	71°5	71°3	70°9	70°6	70°3
76°6	77°0	77°0	76°5	76°0	75°5	75°0	74°5	74°0	73°6	73°0	72°6	72°2	71°8	71°4
77°6	77°6	77°5	76°7	76°2	75°7	75°6	75°2	75°0	74°6	74°2	73°8	73°4	73°2	72°8
75°5	75°6	75°5	75°2	74°8	74°5	73°6	73°0	73°0	72°5	72°3	72°0	71°5	71°5	71°5
77°3	77°4	77°4	77°3	77°0	76°5	76°0	75°7	75°4	75°1	74°6	74°5	74°0	73°6	73°2
75°3	75°5	75°4	75°4	75°2	75°0	74°0	73°0	72°9	72°5	71°8	71°4	71°0	70°6	70°2
77°3	77°4	77°5	77°5	77°2	76°6	76°4	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	74°7	74°0	73°6	73°2	73°0	72°6	72°2	71°8
75°9	76°0	76°0	75°7	75°0	74°3	74°0	73°5	73°0	72°6	72°0	71°4	71°0	70°6	70°2
76°5	76°2	76°0	75°8	75°4	75°0	74°6	74°5	74°5	74°5	74°5	74°5	74°5	74°5	74°5
80°3	80°4	80°0	79°8	79°6	79°0	78°5	78°5	78°5	78°1	78°0	77°7	77°2	76°8	76°4
82°2	82°0	82°0	81°5	80°8	80°8	80°4	80°0	79°2	78°5	78°0	77°5	77°3	77°0	76°6
79°0	79°0	79°0	78°5	77°4	76°8	76°5	75°6	75°0	74°3	73°8	73°2	72°4	71°8	71°2
76°24	76°39	76°37	76°14	75°60	75°13	74°79	74°31	73°85	73°37	72°96	72°49	72°16	71°76	71°19

* Fifteen minutes late.

HORIZONTAL FORCE.												
One Scale Division = "000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean (Guth- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
AUGUST.	1 576'2	2 573'4	3 562'4	4 557'2	5 560'2	6 547'0	7 563'0	8 572'0	9 575'5	10 591'0	11 586'5	12 587'0
	13 580'0	14 580'8	15 592'0	16 565'0	17 556'0	18 555'0	19 565'6	20 576'0	21 583'0	22 678'0	23 579'0	24 576'2
	25 571'5	26 569'0	27 564'0	28 561'0	29 553'5	30 556'0	31 562'0	32 571'4	33 576'3	34 571'8	35 576'8	36 575'8
	37 570'0	38 568'0	39 558'2	40 552'2	41 554'2	42 559'2	43 566'4	44 575'8	45 580'0	46 574'2	47 593'6	48 564'0
	49 573'0	50 576'4	51 564'0	52 545'0	53 564'0	54 569'8	55 567'2	56 566'0	57 570'4	58 568'5	59 564'2	60 590'0
	61 531'6	62 558'0	63 557'6	64 549'0	65 556'0	66 556'5	67 560'5	68 577'0	69 562'5	70 572'1	71 577'0	72 579'5
	73 561'8	74 554'0	75 553'5	76 547'0	77 542'5	78 549'8	79 564'0	80 575'5	81 582'5	82 588'5	83 583'3	84 571'0
	85 —	86 —	87 —	88 —	89 —	90 —	91 —	92 —	93 —	94 —	95 —	96 —
	97 557'0	98 556'0	99 568'2	100 571'2	101 566'0	102 556'0	103 553'0	104 562'2	105 566'4	106 573'0	107 574'2	108 571'8
	109 582'5	110 578'0	111 572'0	112 571'2	113 566'0	114 568'8	115 576'4	116 575'8	117 592'8	118 591'2	119 568'6	120 584'0
	121 584'0	122 582'2	123 573'6	124 552'0	125 545'2	126 566'2	127 572'0	128 581'5	129 601'5	130 587'0	131 591'2	132 567'5
	133 575'8	134 537'8	135 560'5	136 562'5	137 549'0	138 561'8	139 572'0	140 581'0	141 589'0	142 593'2	143 585'2	144 583'0
	145 576'2	146 576'5	147 552'0	148 545'0	149 537'5	150 537'5	151 571'2	152 580'0	153 568'0	154 566'5	155 560'0	156 582'0
	157 558'8	158 561'0	159 564'5	160 564'6	161 551'0	162 551'0	163 556'5	164 570'0	165 569'2	166 578'2	167 579'2	168 581'0
	169 —	170 —	171 —	172 —	173 —	174 —	175 —	176 —	177 —	178 —	179 —	180 —
	181 579'5	182 581'0	183 575'0	184 572'4	185 566'6	186 554'4	187 555'4	188 568'0	189 578'5	190 586'0	191 591'6	192 591'2
	193 583'4	194 584'2	195 577'0	196 570'0	197 568'0	198 566'2	199 558'5	200 577'2	201 587'5	202 587'2	203 590'5	204 583'0
	205 582'4	206 592'5	207 585'0	208 574'8	209 579'0	210 579'4	211 576'2	212 587'0	213 592'6	214 600'0	215 581'4	216 586'0
	217 589'0	218 582'0	219 577'8	220 568'5	221 574'0	222 586'5	223 583'2	224 588'5	225 596'5	226 596'5	227 591'6	228 589'0
	229 571'4	230 580'0	231 586'0	232 568'0	233 571'0	234 572'5	235 576'5	236 579'2	237 577'3	238 576'2	239 578'8	240 595'6
	241 585'0	242 574'0	243 577'0	244 565'4	245 566'0	246 569'4	247 578'0	248 580'8	249 583'8	250 601'4	251 582'5	252 581'0
	253 —	254 —	255 —	256 —	257 —	258 —	259 —	260 —	261 —	262 —	263 —	264 —
	265 589'0	266 589'2	267 588'8	268 578'5	269 570'7	270 568'8	271 570'0	272 582'0	273 572'0	274 583'0	275 591'0	276 602'2
	277 582'0	278 582'4	279 578'2	280 571'0	281 562'0	282 563'4	283 573'0	284 573'0	285 580'0	286 589'0	287 594'2	288 605'5
	289 583'8	290 586'5	291 584'5	292 570'8	293 565'8	294 566'5	295 575'0	296 583'8	297 586'5	298 587'5	299 588'0	300 584'2
	301 577'0	302 580'5	303 576'0	304 573'0	305 568'0	306 568'0	307 572'5	308 585'0	309 601'4	310 581'0	311 589'8	312 631'6
	313 576'3	314 578'5	315 576'0	316 572'0	317 567'8	318 566'6	319 569'2	320 587'5	321 592'2	322 590'8	323 614'8	324 577'8
	325 576'2	326 573'2	327 561'0	328 554'5	329 568'5	330 574'0	331 570'0	332 568'2	333 578'1	334 589'6	335 583'5	336 593'0
	337 —	338 —	339 —	340 —	341 —	342 —	343 —	344 —	345 —	346 —	347 —	348 —
	349 580'5	350 575'6	351 571'2	352 566'8	353 567'0	354 563'0	355 561'0	356 571'0	357 579'0	358 579'2	359 580'4	360 576'7
Hourly Means	575'15	574'26	571'38	563'41	561'37	563'59	568'01	576'82	581'63	583'98	583'73	584'98
TEMPERATURE OF THE BILAR MAGNET												
AUGUST.	1 72'0	2 73'0	3 74'0	4 74'4	5 75'4	6 76'0	7 76'0	8 76'5	9 77'0	10 77'2	11 77'2	12 77'4
	13 —	14 —	15 —	16 —	17 —	18 —	19 —	20 —	21 —	22 —	23 —	24 —
	25 71'0	26 71'5	27 72'2	28 73'0	29 73'7	30 75'0	31 75'8	32 77'0	33 77'7	34 78'7	35 79'0	36 79'0
	37 73'0	38 73'4	39 74'1	40 75'2	41 76'0	42 77'4	43 78'5	44 79'2	45 79'7	46 81'0	47 81'4	48 81'8
	49 76'5	50 77'0	51 77'6	52 78'5	53 79'5	54 80'7	55 81'5	56 82'2	57 82'6	58 83'3	59 83'8	60 83'8
	61 78'7	62 78'3	63 77'7	64 79'2	65 80'6	66 81'4	67 81'7	68 81'8	69 82'2	70 82'4	71 82'7	72 82'7
	73 76'8	74 77'6	75 76'4	76 77'0	77 77'4	78 78'3	79 79'4	80 80'0	81 81'0	82 81'5	83 81'5	84 82'0
	85 75'5	86 75'5	87 75'5	88 75'0	89 75'0	90 75'0	91 75'5	92 76'2	93 76'5	94 77'0	95 77'0	96 77'0
	97 —	98 —	99 —	100 —	101 —	102 —	103 —	104 —	105 —	106 —	107 —	108 —
	109 73'0	110 72'3	111 72'4	112 72'5	113 73'4	114 74'1	115 74'5	116 75'0	117 75'7	118 76'5	119 77'2	120 77'4
	121 69'3	122 70'0	123 70'5	124 71'2	125 72'3	126 73'0	127 73'6	128 74'0	129 74'4	130 74'8	131 75'3	132 75'5
	133 70'0	134 70'4	135 70'7	136 71'6	137 73'0	138 74'2	139 75'3	140 75'8	141 76'4	142 77'3	143 77'8	144 78'4
	145 75'0	146 75'0	147 74'8	148 74'8	149 76'2	150 77'0	151 78'0	152 78'7	153 78'9	154 78'5	155 78'8	156 79'0
	157 76'7	158 77'5	159 75'2	160 75'9	161 76'9	162 77'3	163 77'4	164 77'5	165 78'0	166 78'5	167 78'5	168 79'0
	169 73'0	170 73'5	171 74'1	172 75'0	173 76'0	174 77'2	175 77'5	176 78'2	177 78'7	178 79'6	179 80'0	180 80'4
	181 —	182 —	183 —	184 —	185 —	186 —	187 —	188 —	189 —	190 —	191 —	192 —
	193 71'5	194 72'0	195 72'5	196 72'8	197 73'6	198 74'4	199 74'6	200 74'6	201 74'8	202 75'0	203 75'3	204 75'4
	205 68'2	206 68'2	207 68'5	208 69'4	209 69'5	210 69'9	211 69'8	212 69'8	213 70'0	214 70'4	215 70'7	216 71'0
	217 65'8	218 66'2	219 66'4	220 66'6	221 66'5	222 67'4	223 67'8	224 68'5	225 69'0	226 69'5	227 69'5	228 69'5
	229 67'5	230 67'4	231 67'2	232 67'0	233 67'2	234 67'1	235 67'5	236 68'0	237 68'4	238 68'4	239 68'6	240 68'7
	241 67'0	242 67'4	243 68'0	244 68'6	245 69'7	246 71'0	247 72'0	248 72'5	249 73'2	250 73'5	251 74'2	252 74'2
	253 70'6	254 70'6	255 70'6	256 70'4	257 70'5	258 71'0	259 71'5	260 71'8	261 72'3	262 72'6	263 72'6	264 72'8
	265 —	266 —	267 —	268 —	269 —	270 —	271 —	272 —	273 —	274 —	275 —	276 —
	277 68'5	278 69'0	279 69'5	280 70'4	281 71'2	282 72'0	283 72'3	284 72'4	285 72'5	286 72'6	287 72'7	288 73'1
	289 66'6	290 67'0	291 68'0	292 69'4	293 70'7	294 71'4	295 71'8	296 72'4	297 72'7	298 73'8	299 74'0	300 74'5
	301 69'4	302 69'5	303 70'7	304 71'4	305 72'0	306 72'6	307 73'0	308 73'5	309 74'0	310 74'8	311 75'0	312 74'7
	313 69'6	314 70'0	315 70'5	316 72'0	317 72'8	318 74'2	319 75'0	320 75'0	321 75'6	322 75'8	323 75'8	324 75'0
	325 71'0	326 70'8	327 70'8	328 71'0	329 71'5	330 72'4	331 73'0	332 73'6	333 74'6	334 75'6	335 76'0	336 75'8
	337 71'9	338 72'0	339 72'5	340 73'2	341 74'0	342 75'0	343 76'2	344 76'2	345 75'7	346 75'8	347 75'3	348 75'0
	349 —	350 —	351 —	352 —	353 —	354 —	355 —	356 —	357 —	358 —	359 —	360 —
Hourly Means	71'59	71'83	72'08	72'69	73'46	74'28	74'83	75'28	75'71	76'26	76'48	76'63

* Fourteen minutes late.

* Five minutes late.

* Ten minutes late.

HORIZONTAL FORCE.

One Scale Division = 0.00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.

10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
Sc. Div. 586°5	Sc. Div. 587°0	Sc. Div. 577°0	Sc. Div. 573°0	Sc. Div. 564°0	Sc. Div. 568°4	Sc. Div. 568°6	Sc. Div. 568°0	Sc. Div. 567°5	Sc. Div. 577°4	Sc. Div. 576°5	Sc. Div. 580°2	Sc. Div. 578°8	Sc. Div. 577°2	Sc. Div. 572°00
579°0	576°2	572°0	566°2	561°8	570°2	569°0	569°2	570°2	572°0	573°0	574°0	568°4	569°0	571°94
576°8	575°8	565°8	564°0	567°8	571°0	577°5	571°0	567°0	570°0	568°2	568°0	571°0	572°0	568°43
593°6	564°0	572°0	574°0	556°5	560°0	563°9	564°2	563°0	567°0	573°0	578°0	577°5	577°2	568°42
564°2	590°0	565°0	552°7	564°0	567°5	570°0	519°5	567°7	561°4	557°2	489°1	538°4	536°0	558°63
577°0	579°5	561°5	551°7	562°5	562°0	568°2	566°2	548°0	479°0	547°8	559°5	535°8	522°5	554°25
583°3	571°0	577°6	562°2	565°0	562°8	562°4	571°0	—	—	—	—	—	—	566°03
574°2	571°8	560°2	561°4	566°8	573°0	571°0	571°8	561°5	569°0	559°0	566°0	579°2	575°5	568°65
568°6	584°0	572°2	578°6	569°5	571°0	564°8	577°2	579°0	569°0	583°5	583°0	583°5	583°2	577°57
591°2	567°5	570°0	564°0	564°0	549°0	555°5	556°0	567°0	561°2	552°0	560°2	566°0	579°0	568°74
585°2	583°0	571°0	569°5	568°0	551°2	560°8	543°0	542°2	497°4	559°4	563°2	572°8	578°0	563°64
560°0	582°0	572°4	569°2	575°0	540°3	552°8	554°5	555°2	563°5	555°0	578°2	560°6	550°8	562°50
579°2	581°0	610°2	564°4	555°0	564°0	560°2	551°0	—	—	—	—	—	—	564°23
591°6	591°2	576°6	565°5	585°4	584°8	565°0	573°0	576°6	582°2	582°0	580°0	576°0	580°2	576°12
590°5	583°0	581°2	581°0	565°6	564°0	577°2	570°0	581°5	585°2	585°0	583°8	582°0	575°4	577°82
581°4	586°0	582°5	581°2	582°5	574°0	585°0	586°2	588°2	589°2	596°8	587°0	588°2	589°2	585°26
591°6	589°0	580°2	586°0	586°2	587°2	588°0	588°8	588°4	587°8	588°4	585°5	586°0	570°5	585°25
578°8	595°6	575°2	582°2	581°0	583°8	585°5	583°0	585°0	582°8	582°0	579°9	580°0	580°0	579°70
582°5	581°0	582°5	572°5	577°0	579°5	579°0	579°0	—	—	—	—	—	—	580°36
591°0	602°2	577°2	568°0	568°0	569°0	564°0	574°0	592°8	585°0	584°8	583°8	590°0	582°2	578°60
584°2	605°5	588°0	570°5	566°2	557°0	565°2	578°7	585°7	582°5	581°5	578°6	583°5	585°0	577°79
588°0	584°2	586°0	581°6	578°0	577°8	568°8	563°2	579°4	568°2	577°8	577°5	575°4	580°0	578°19
589°8	631°6	564°0	565°0	569°0	570°0	572°8	582°5	581°5	590°6	585°0	587°0	571°2	582°0	580°18
614°8	577°8	560°4	574°0	578°0	587°5	561°0	564°0	571°0	575°0	567°4	579°6	567°4	567°8	575°94
583°5	593°0	573°0	574°5	575°0	572°0	577°0	582°8	—	—	—	—	—	—	574°86
580°4	576°7	572°0	571°0	572°0	568°0	569°0	572°2	573°0	573°2	574°4	580°2	576°2	575°5	572°84
583°73	584°98	574°83	570°27	570°26	568°65	569°24	586°46	571°73	568°42	573°55	573°25	573°34	572°41	572°61

TEMPERATURE OF THE BIFILAR MAGNET.

77°2	77°4	77°5	77°0	76°1	75°7	75°7	75°5	74°3	73°6	73°2	73°0	72°2	71°5	75°06
79°0	79°0	78°7	78°5	77°6	77°2	76°8	76°4	75°8	75°0	74°5	74°2	73°8	73°2	75°64
81°4	81°8	82°0	81°6	81°2	80°5	80°2	79°5	79°0	78°7	78°5	78°0	77°8	76°9	78°53
83°8	83°8	83°8	83°5	83°4	83°0	82°7	82°5	82°1	81°4	81°0	80°5	80°0	80°5	81°31
82°7	82°7	82°6	82°6	82°4	81°8	81°5	80°6	79°8	79°2	78°7	78°0	77°6	77°3	80°48
81°5	82°0	81°8	81°2	80°5	80°0	79°6	79°0	78°8	78°0	77°8	77°2	76°6	76°2	78°98
77°0	77°0	77°0	76°5	76°5	76°2	75°8	75°6	—	—	—	—	—	—	75°25
77°2	77°4	77°4	77°3	75°8	74°4	75°8	73°0	72°5	72°2	71°7	71°2	70°4	69°5	73°88
75°3	75°5	75°5	75°2	74°5	73°5	73°0	72°8	72°2	71°4	71°1	71°0	70°5	70°2	72°70
77°8	78°4	78°0	77°4	76°6	76°5	76°0	75°7	75°4	75°0	74°7	74°5	74°4	74°2	74°97
78°8	79°0	79°0	79°0	78°5	78°0	77°6	77°5	76°7	76°4	75°8	75°4	75°0	75°4	77°04
78°5	79°0	79°0	78°8	78°0	77°8	77°6	76°6	76°0	75°0	75°0	74°5	74°0	73°4	76°84
80°0	80°4	80°4	80°4	80°2	79°6	79°0	78°7	78°5	—	—	—	—	—	76°41
75°3	75°4	75°2	74°8	74°0	73°2	72°5	72°0	71°5	70°8	70°2	69°8	69°2	68°8	72°85
70°7	71°0	71°0	70°9	70°2	70°0	69°3	68°7	68°4	67°8	67°8	67°6	67°0	66°6	69°20
69°5	69°5	69°5	69°0	69°0	68°6	68°6	68°5	68°2	68°0	67°7	67°9	68°0	67°6	68°05
68°6	68°7	68°8	68°8	68°8	68°7	68°6	68°4	68°4	68°9	68°0	67°8	67°5	67°2	68°01
73°5	74°2	74°0	74°0	73°6	73°3	73°3	72°6	72°4	72°0	71°7	71°5	71°5	71°0	71°65
72°6	72°8	72°5	72°4	72°0	71°9	71°7	71°6	—	—	—	—	—	—	71°26
72°7	73°1	73°4	73°2	72°8	72°0	71°4	70°5	70°0	69°2	69°0	68°4	67°7	67°2	70°88
74°0	74°5	74°5	74°0	73°5	73°0	72°6	72°2	71°8	71°5	71°0	70°6	70°4	69°8	71°55
75°0	74°7	74°7	74°0	73°8	73°6	72°8	72°2	72°0	71°2	71°0	70°6	70°2	70°0	72°36
75°8	75°0	75°3	75°0	74°6	74°2	73°8	73°5	72°6	72°1	72°0	71°8	71°7	71°5	73°31
76°0	75°8	75°8	75°6	75°6	75°4	75°0	74°5	74°1	74°0	73°7	73°2	73°0	72°6	73°69
75°3	75°0	75°4	74°8	74°0	73°6	73°2	73°0	—	—	—	—	—	—	74°15
79°2	79°2	79°2	78°3	77°7	77°4	77°0	76°7	76°3	74°7	74°4	74°0	73°6	73°0	76°41
76°48	76°63	76°61	76°29	75°78	75°33	74°95	74°52	73°88	73°39	73°06	72°71	72°34	71°94	74°25

HORIZONTAL FORCE.													
One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.													
Mean (Galtin- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
SEPTEMBER.	1	Sc. Div. 576.0	Sc. Div. 572.2	Sc. Div. 566.0	Sc. Div. 569.6	Sc. Div. 564.0	Sc. Div. 566.5	Sc. Div. 571.5	Sc. Div. 571.0	Sc. Div. 576.0	Sc. Div. 576.5	Sc. Div. 576.0	Sc. Div. 570.7
	2	574.5	570.4	561.0	555.4	558.5	562.2	568.2	572.2	575.2	583.0	577.0	573.2
	3	572.0	567.0	559.0	552.0	547.3	552.0	561.8	573.2	581.0	590.2	589.6	585.2
	4	528.0	544.2	564.2	551.4	547.0	544.4	546.2	558.0	571.4	579.4	576.3	579.0
	5	575.2	537.8	555.4	575.2	522.5	544.0	538.0	548.0	567.0	624.0	585.0	548.0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	575.2	574.0	568.5	560.8	556.0	552.0	551.0	564.0	569.2	573.0	573.2	568.4
	8	565.8	571.5	551.0	547.5	532.5	526.0	548.5	557.0	575.2	585.0	573.2	568.2
	9	574.0	577.0	569.3	569.0	565.2	561.4	563.0	568.8	577.2	587.4	585.8	590.0
	10	584.0	585.2	583.0	574.4	568.5	568.2	572.2	589.0	592.0	594.8	592.0	587.0
	11	525.8	578.8	556.4	571.0	568.0	543.0	535.0	580.0	578.0	594.0	569.0	582.0
	12	572.0	574.8	575.0	541.0	544.0	557.0	567.0	571.0	583.2	576.0	578.8	580.0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	575.2	551.0	550.0	549.0	551.0	549.0	557.4	566.4	576.2	574.5	576.8	568.4
	15	575.0	570.0	569.5	558.2	561.9	569.2	569.6	575.2	583.0	591.6	583.0	576.4
	16	592.0	586.2	579.8	581.2	583.6	585.6	586.6	586.5	592.0	597.0	594.0	592.7
	17	595.4	595.0	594.2	587.0	574.0	572.5	580.0	584.2	595.0	601.0	596.2	598.0
	18	606.2	597.5	596.6	591.2	586.6	582.9	587.0	594.0	601.0	606.5	602.0	600.0
	19	603.0	596.5	595.4	591.0	578.0	575.0	583.0	581.2	594.0	590.2	588.0	593.2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	600.0	596.5	586.5	576.0	572.2	577.0	583.6	594.2	606.4	586.6	590.5	602.0
	22	514.4	488.7	456.1	467.7	516.8	525.9	545.4	596.1	603.5	626.3	639.0	580.0
	23	596.6	592.8	587.5	577.2	568.2	572.0	574.0	581.4	593.0	589.0	590.4	612.4
	24	588.9	585.8	573.9	566.2	564.4	563.8	568.5	574.4	586.4	603.4	593.4	589.4
	25	598.4	591.2	589.4	580.9	579.4	578.4	595.9	593.8	601.4	604.2	606.4	606.2
	26	606.4	599.4	594.4	591.6	578.2	583.6	583.8	595.2	603.2	605.2	605.9	614.2
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	611.8	608.0	608.4	602.6	598.8	598.8	600.0	608.6	609.6	606.6	610.8	612.6
	29	611.8	608.6	604.0	601.4	596.8	596.0	600.1	600.6	603.6	606.6	601.1	606.6
	30	608.6	606.1	603.6	594.0	590.6	588.8	590.6	598.1	603.6	606.6	617.6	616.8
Hourly Means		581.01	577.93	572.89	568.21	564.38	565.08	570.42	580.08	588.55	594.61	591.19	588.48
TEMPERATURE OF THE BILAR MAGNET.													
SEPTEMBER.	1	75.6	73.8	74.4	75.4	76.4	77.3	78.8	79.5	80.0	80.4	80.6	80.7
	2	76.5	76.0	76.0	77.0	77.6	78.3	78.8	79.7	80.5	81.0	80.2	81.0
	3	77.2	77.0	77.0	76.7	76.7	77.0	77.0	77.2	77.2	77.2	77.0	76.8
	4	74.8	75.3	75.7	76.2	76.2	76.5	76.8	77.0	77.5	78.0	78.2	78.0
	5	75.8	76.4	76.5	77.5	78.0	78.5	78.5	78.2	78.4	78.5	78.8	78.7
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	74.2	75.0	76.0	77.5	78.3	78.9	79.4	80.6	81.6	81.9	82.1	82.0
	8	75.0	75.4	75.4	75.9	75.8	76.0	76.1	76.1	76.2	76.0	75.6	75.0
	9	67.2	67.4	68.0	68.6	69.0	69.6	69.5	69.4	69.4	69.5	69.6	69.6
	10	66.8	66.8	67.5	68.6	69.0	69.6	69.6	69.8	69.9	70.3	70.5	70.7
	11	68.5	69.0	69.6	70.6	71.4	72.2	73.0	73.6	74.4	75.2	75.0	75.4
	12	72.5	73.4	74.4	75.5	76.4	77.4	78.2	78.8	79.6	79.4	75.8	75.8
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	74.2	74.2	74.5	75.2	76.6	77.8	78.2	78.8	79.4	79.8	79.7	79.6
	15	73.0	72.5	73.0	73.2	73.0	72.8	72.2	72.0	72.0	72.4	72.4	72.4
	16	66.0	66.0	66.2	67.0	67.7	68.1	68.2	68.4	68.6	69.0	69.0	69.4
	17	65.8	65.6	65.4	65.2	65.3	65.5	65.7	66.0	66.4	66.4	66.4	66.0
	18	64.1	64.0	64.0	64.8	65.9	66.5	67.0	67.5	68.0	68.5	68.6	68.8
	19	64.2	64.0	64.4	65.5	66.3	67.5	68.4	69.0	69.7	70.4	71.0	71.4
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	65.5	65.0	64.5	64.2	65.1	64.5	64.8	65.2	65.4	66.0	66.4	66.5
	22	61.4	61.6	61.7	63.0	63.5	63.8	64.3	64.5	65.2	66.0	66.5	66.5
	23	61.4	61.4	62.2	62.8	64.0	65.2	67.4	67.5	68.2	6.9	69.4	70.2
	24	68.0	68.0	68.0	68.0	68.0	68.1	68.3	68.4	68.2	68.2	68.0	67.7
	25	63.8	63.0	63.0	62.6	62.4	62.4	62.4	62.4	62.4	62.6	62.6	62.0
	26	60.0	60.0	60.5	61.4	62.0	62.7	63.0	63.4	63.2	63.5	63.5	63.5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	56.8	56.4	56.8	57.4	58.1	59.0	59.4	59.8	60.4	61.2	62.0	62.2
	29	60.5	60.5	60.8	62.4	62.4	63.6	64.4	64.6	65.2	65.8	65.8	65.6
	30	63.0	63.0	63.5	64.4	65.5	65.9	66.4	66.9	67.7	68.2	68.5	68.0
Hourly Means		68.07	68.10	68.42	69.10	69.64	70.18	70.61	70.86	71.21	71.57	71.65	71.67

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H.F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
570.7	570.7	571.4	567.2	571.2	573.2	571.6	567.8	569.2	574.0	569.0	568.4	571.2	574.5	571.03
570.7	570.7	571.2	582.4	574.0	575.6	574.8	576.1	574.6	571.0	572.0	572.0	571.2	572.0	571.57
570.7	570.7	585.6	583.0	583.2	585.0	591.0	581.0	591.0	572.0	546.0	556.0	542.0	536.3	570.10
570.7	570.7	560.4	566.0	558.0	567.0	564.3	573.0	568.0	574.8	546.2	530.0	546.2	569.4	558.95
570.7	570.7	562.0	543.2	554.5	557.6	557.0	558.2	—	—	—	—	—	—	—
570.7	570.7	—	—	—	—	—	—	570.6	573.8	572.2	572.0	572.2	573.4	561.95
570.7	570.7	568.0	567.0	564.8	568.2	562.4	565.0	557.8	549.2	546.4	550.0	558.8	558.0	562.66
570.7	570.7	572.0	571.8	575.0	578.0	577.8	579.0	581.0	576.6	579.0	579.0	576.9	573.0	567.52
570.7	570.7	585.8	579.0	582.2	584.0	585.0	584.0	583.6	583.0	581.5	581.0	583.0	584.2	578.10
570.7	570.7	580.0	577.8	586.0	—	586.5	590.0	584.5	588.0	569.0	568.2	566.0	596.8	581.87
570.7	570.7	578.0	578.0	580.0	560.2	541.6	564.8	563.2	570.5	560.0	531.4	579.4	570.8	564.95
570.7	570.7	576.4	576.2	573.0	581.8	580.0	580.2	—	—	—	—	—	—	—
570.7	570.7	—	—	—	—	—	—	577.2b	578.5	534.0	566.0	577.5	574.0	570.61
570.7	570.7	566.0	565.5	566.8	573.5	566.4	563.0	574.0	567.0	558.9	566.6	555.8	585.0	564.73
570.7	570.7	581.0	583.4	583.8	585.8	586.4	587.0	587.2	587.5	587.5	586.5	589.5	586.2	579.77
570.7	570.7	589.9	592.8	590.0	584.0	589.3	583.0	586.5	592.0	591.2	587.4	582.2	599.8	584.55
570.7	570.7	594.0	579.0	591.2	595.0	595.2c	597.0	597.2	600.0	597.0	598.6	602.4	603.9	592.54
570.7	570.7	597.2	594.6	595.8	595.8	601.0	593.8	594.8	595.2	597.0	598.6	600.2	603.5	596.62
570.7	570.7	592.0	592.8	591.0	590.0	591.4	593.0	—	—	—	—	—	—	—
570.7	570.7	—	—	—	—	—	—	593.0	598.8	592.0	590.0	595.5	596.2	591.01
570.7	570.7	605.5	586.0	591.0	601.0	589.0	568.0	610.0	541.2	548.5	533.0	506.6	571.8	580.10
570.7	570.7	585.5	567.5	561.2	560.0	558.0	561.5	565.0	581.6	587.0	593.7	594.0	595.4	560.26
570.7	570.7	587.6	590.0	591.2	593.4	571.4	584.4	580.0	593.2	587.8	581.4	587.4	590.4	586.61
570.7	570.7	596.7	589.4	592.6	595.6	594.2	596.6	595.0	596.6	596.0	598.4	601.6	599.0	588.00
570.7	570.7	607.9	601.6	598.4	606.2	600.4	602.6	602.4	598.8	598.4	585.4	603.4	607.4	597.56
570.7	570.7	596.2	609.4	609.2	607.5	606.4	606.4	—	—	—	—	—	—	—
570.7	570.7	589.4	601.9	610.6	611.1	608.1	610.8	611.9	510.4	611.9	609.4	612.4	616.4	602.86
570.7	570.7	607.6	606.4	609.4	607.6	608.6	603.6	610.6	610.8	612.8	615.3	614.0	613.2	607.72
570.7	570.7	600.6	593.6	594.0	603.6	612.1	600.6	602.8	605.8	608.6	609.8	609.8	608.6	605.24
570.7	570.7	—	—	—	—	—	—	590.8	583.6	591.0	590.4	599.6	603.4	599.47
570.7	570.7	583.88	582.63	583.89	585.63	583.46	583.48	585.73	583.61	578.46	577.56	580.70	587.06	580.78

TEMPERATURE OF THE BIFILAR MAGNET.

80°6	80°7	80°6	79°8	79°4	79°2	78°6	78°3	78°0	77°5	77°2	77°0	76°8	76°7	77°92
80°2	81°0	81°0	80°6	80°4	80°0	79°5	79°0	78°8	78°7	78°4	78°2	78°0	77°5	78°86
77°0	76°8	76°7	76°5	76°5	76°4	76°5	76°5	76°2	75°5	75°5	75°5	75°5	75°0	76°51
78°2	78°0	78°0	77°8	77°5	77°5	77°4	77°0	77°0	76°5	76°5	76°4	76°2	76°0	76°83
78°8	78°7	78°5	78°5	78°1	77°7	77°0	76°8	—	75°5	75°5	75°2	75°0	74°5	77°13
—	—	—	—	—	—	—	—	75°5	75°5	75°2	75°0	75°0	74°5	—
82°1	82°0	81°8	81°3	81°0	80°5	79°8	79°4	79°0	78°0	77°0	76°0	76°0	75°5	78°87
75°6	75°0	74°4	74°0	73°6	73°0	72°3	71°5	71°0	70°6	70°0	69°0	68°6	68°0	73°52
69°6	69°6	69°6	69°0	69°0	68°5	68°3	68°0	67°8	67°4	67°2	67°0	67°0	66°8	68°43
70°5	70°7	70°9	70°5	70°5	—	70°0	69°5	69°3	69°0	69°0	68°8	68°5	68°5	69°29
75°0	75°4	75°5	75°2	75°0	74°7	74°7	74°2	74°2	73°6	73°2	73°2	73°0	72°8	73°22
75°6	75°8	75°8	76°0	75°6	75°2	75°0	74°6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	75°7	75°7	75°5	75°3	75°0	74°2	75°49
79°7	79°6	80°0	80°0	79°8	79°5	79°2	78°6	78°3	77°5	77°0	75°7	74°5	73°5	77°57
72°4	72°4	72°6	71°5	71°2	70°8	70°5	69°5	69°0	68°5	68°1	67°5	67°0	66°8	71°00
69°0	69°4	69°0	68°5	68°4	68°0	68°0	67°7	67°5	67°0	67°0	66°5	66°2	65°8	67°63
66°4	66°0	66°0	65°6	65°6	65°3	65°0	65°0	64°8	64°6	64°6	64°5	64°4	64°2	65°39
68°6	68°8	68°6	68°5	68°0	67°6	67°0	66°8	66°2	65°6	65°5	65°1	64°8	64°5	66°50
71°0	71°4	71°3	71°2	70°6	70°1	69°9	69°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	68°4	68°2	68°3	68°2	67°4	66°4	68°38
66°4	66°5	66°8	66°3	65°7	65°4	64°8	64°4	64°2	63°5	63°0	62°6	62°2	62°0	64°75
66°5	66°5	66°4	66°1	66°0	65°5	65°0	64°5	64°0	63°5	63°0	62°8	62°8	62°0	64°15
69°4	70°2	70°2	70°2	70°0	69°7	69°5	69°6	69°6	69°4	69°0	69°0	69°0	68°4	67°59
68°0	67°7	67°3	67°2	66°6	66°6	66°4	66°3	65°8	65°4	65°0	64°8	64°5	64°2	66°96
62°6	62°0	62°0	62°0	62°0	61°9	61°6	61°4	61°2	61°0	60°8	60°5	60°4	60°4	61°95
63°5	63°5	63°5	63°4	63°0	62°6	62°6	62°2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	57°5	58°0	58°0	57°5	57°3	57°0	61°22
62°0	62°2	62°0	61°8	61°4	61°2	61°0	60°8	60°5	60°5	60°7	60°6	60°6	60°6	60°05
65°8	65°6	65°5	65°2	65°0	64°6	64°4	64°0	63°8	63°6	63°4	63°1	63°2	63°0	63°77
68°5	68°0	67°8	67°6	67°4	67°2	67°0	66°8	66°4	66°0	65°5	65°2	65°0	65°0	66°16
71°65	71°67	71°61	71°32	71°05	70°75	70°42	70°07	69°60	69°24	68°98	68°65	68°42	68°05	69°97

* Missed.

* Forty minutes late.

* Four minutes late.

HORIZONTAL FORCE.												
One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
OCTOBER.	1 598'0	594'0	588'0	576'0	583'0	577'5	589'0	585'2	587'6	590'2	593'5	590'6
	2 598'0	595'0	585'0	586'8	582'8	581'6	580'6	593'6	593'2	602'0	601'5	596'2
	3 608'2	601'2	594'0	587'5	587'2	589'8	597'3	594'6	605'0	610'6	612'2	607'0
	4 608'0	604'2	594'2	593'0	588'8	585'2	590'2	594'0	596'2	600'5	603'2	603'0
	5 605'2	601'0	596'0	586'9	583'5	578'8	587'5	588'0	594'1	601'0	601'0	602'2
	6 598'0	599'0	591'2	570'5	556'0	559'0	558'0	567'0	584'5	591'0	588'0	588'8
	7 557'5	513'0	546'0	538'1	553'0	558'0	559'2	565'8	574'4	585'5	582'4	582'0
	8 578'0	583'4	585'0	579'8	567'2	562'4	565'5	567'0	575'0	573'0	587'5	589'0
	9 582'0	574'0	558'0	555'2	572'8	583'0	583'2	584'4	584'6	594'0	599'0	601'0
	10											
	11											
	12 611'5	596'0	593'0	599'0	595'0	593'0	593'0	590'0	587'9	595'0	600'0	593'8
	13 601'4	599'0	596'7	593'5	587'0	584'5	585'0	595'2	599'8	603'2	599'2	594'2
	14 611'5	606'2	603'0	598'7	598'8	599'2	603'2	606'2	608'4	605'8	603'8	603'1
	15 614'0	611'2	605'8	599'8	595'6	594'5	596'8	603'0	606'0	606'0	609'5	614'5
	16 614'5	609'4	605'4	596'8	596'2	600'2	602'0	609'0	607'8	610'0	605'4	605'0
	17 612'8	610'0	606'0	604'0	601'0	602'0	605'0	611'7	616'0	626'0	620'0	618'4
	18											
	19 629'0	628'0	622'5	619'0	611'0	604'0	600'0	604'2	613'0	630'0	629'0	610'5
	20 620'2	624'6	611'0	603'2	603'3	594'0	601'2	605'5	605'4	614'2	613'4	620'6
	21 614'0	612'2	613'7	611'0	608'5	602'4	609'0	608'2	619'8	613'2	629'0	613'0
	22 620'2	618'2	599'0	591'0	584'0	584'3	587'0	585'6	595'3	618'8	614'2	613'5
	23 624'0	621'5	612'2	609'0	605'0	603'5	607'0	610'0	619'0	623'5	622'2	628'0
	24 625'0	625'4	618'0	611'0	610'5	611'0	617'0	619'0	606'2	619'2	621'2	625'8
	25											
	26 626'5	623'0	622'0	613'8	609'0	604'2	603'8	610'4	620'0	612'4	614'8	616'2
	27 617'0	616'2	610'6	603'2	599'0	593'8	594'2	600'2	603'4	606'2	606'8	612'0
	28 620'2	618'5	615'0	605'8	601'5	600'0	599'0	601'0	613'2	614'0	618'8	625'0
	29 622'0	614'0	619'0	613'5	608'4	606'0	604'0	606'0	606'2	609'0	613'4	619'3
	30 622'0	617'0	613'8	622'0	612'5	608'0	608'1	608'8	614'0	616'2	620'0	620'0
	31 617'5	624'0	621'0	618'2	616'0	617'2	615'0	620'2	620'0	620'8	627'0	629'0
Nov. 1												
Hourly Means	609'49	605'16	600'93	595'79	593'21	591'74	594'13	597'55	602'07	607'09	608'74	608'48
TEMPERATURE OF THE BIFILAR MAGNET.												
OCTOBER.	1 64'2	63'8	63'5	63'0	63'0	62'8	63'0	63'0	63'0	63'0	63'0	62'6
	2 59'0	59'0	58'5	58'5	58'4	58'5	58'8	59'3	59'4	60'0	60'5	61'1
	3 55'7	55'2	56'0	57'8	58'4	58'8	59'5	60'0	60'0	60'4	61'1	61'2
	4											
	5 56'4	56'2	56'4	58'0	58'4	59'6	60'5	61'2	61'4	62'9	63'5	64'0
	6 58'4	58'4	59'0	60'1	60'9	62'1	62'5	63'5	63'9	64'5	64'7	64'5
	7 61'0	61'1	62'0	63'5	64'4	65'4	65'6	66'4	66'7	67'2	67'5	67'7
	8 66'0	66'0	66'0	66'2	66'4	66'8	67'0	67'0	66'6	66'6	66'6	66'0
	9 64'4	64'2	64'0	64'8	66'2	67'0	67'4	67'5	66'6	66'5	66'7	64'9
	10 59'0	58'5	58'2	58'0	58'1	58'5	58'7	59'0	59'2	59'6	60'2	60'5
	11											
	12 56'8	57'2	58'1	58'8	59'9	60'7	61'0	62'0	62'4	63'2	63'5	63'4
	13 61'8	61'6	61'4	61'0	60'6	60'8	60'8	60'4	59'7	59'0	58'6	58'2
	14 55'9	55'5	56'0	56'7	57'0	57'6	58'0	58'3	58'4	58'8	59'0	58'7
	15 56'8	56'5	56'6	57'0	58'0	58'2	58'4	58'5	58'4	59'0	59'4	59'0
	16 56'0	55'6	55'6	55'6	56'3	57'1	57'5	58'1	58'4	58'6	59'3	59'5
	17 55'8	55'1	54'8	54'5	54'3	54'6	55'0	55'0	55'0	55'1	55'0	54'3
	18											
	19 48'3	48'2	48'7	50'0	51'2	52'0	52'5	52'8	53'0	53'5	54'2	53'6
	20 52'6	52'5	52'5	52'3	53'0	53'8	53'4	55'0	55'2	54'8	54'8	54'5
	21 51'0	51'2	51'0	50'6	51'7	52'4	52'9	53'4	53'3	53'8	53'5	53'7
	22 54'0	53'6	52'7	53'0	53'0	53'0	52'8	52'6	52'4	52'1	52'1	51'9
	23 48'2	47'8	47'2	46'8	47'3	47'8	48'4	49'2	49'3	50'0	51'0	51'3
	24 50'5	50'5	50'4	51'0	52'3	52'6	53'0	53'5	53'6	54'2	54'7	54'8
	25											
	26 49'6	50'0	50'0	50'2	50'8	51'8	53'0	54'2	54'6	55'5	55'8	54'6
	27 57'4	57'4	57'0	56'5	56'6	57'4	57'8	58'0	58'2	58'5	58'3	57'3
	28 52'8	52'4	52'6	52'4	52'0	52'2	52'2	52'5	53'8	54'0	54'5	54'5
	29 52'5	51'5	51'1	51'7	52'5	53'2	53'7	54'0	54'2	54'6	54'6	54'6
	30 51'4	51'2	50'6	50'4	50'5	51'0	51'5	51'7	52'0	52'0	52'5	51'6
	31 49'0	48'8	48'5	49'0	49'0	49'0	48'7	48'5	48'5	48'2	48'2	48'0
Nov. 1												
Hourly Means	55'72	55'52	55'50	55'83	56'30	56'84	57'17	57'58	57'69	57'99	58'21	58'00

* Twenty-five minutes late.

* Three minutes late.

12h.
593'0
592'0
608'0
601'0
576'4
571'2
569'4
574'2
601'0
596'6
594'2
607'2
614'5
606'0
615'8
603'8
609'2
605'0
616'5
628'2
613'4
620'0
612'0
624'0
619'0
621'5
632'8
604'36

62'4
61'0
60'7
64'0
64'0
67'6
65'6
64'0
60'2
63'2
58'1
58'7
58'8
60'0
53'8
53'6
54'0
54'0
51'0
51'1
54'6
55'3
57'0
54'4
54'0
61'6
48'0
57'78

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1° 63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
590'6	590'6	593'0	592'5	591'8	598'0	599'0	601'0	602'0	604'2	600'0	601'0	605'0	593'5	593'48
596'2	596'2	592'0	598'8	576'1	569'3	575'0	572'0	570'0	562'6	575'5	586'0	589'0	590'8	584'31
607'0	607'0	608'0	607'7	607'0	604'0	604'0	595'0	—	—	—	—	—	—	602'68
—	—	—	—	—	—	—	—	605'0	607'2	605'6	609'0	607'3	610'0	598'90
603'0	603'0	601'0	599'5	599'0	599'2	597'8	599'4	599'8	600'8	602'4	603'8	605'5	605'0	593'00
602'2	602'2	576'4	593'2	594'0	594'2	592'6	594'2	581'2	591'2	594'1	599'0	596'6	600'0	560'17
588'0	588'8	571'2	571'4	545'5	529'0	535'0	474'0	476'5	539'0	537'4	545'0	583'0	586'2	570'07
582'4	582'0	569'4	576'2	579'0	580'0	588'0	588'0	574'0	566'5	579'0	590'0	588'0	588'6	566'74
587'5	589'0	574'2	567'0	565'0	547'5	557'8	553'5	534'5	547'2	530'0	558'4	562'8	591'0	590'50
599'0	601'0	601'0	603'0	602'2	604'0	600'2	602'0	—	—	—	—	—	—	597'26
—	—	—	—	—	—	—	—	600'5	602'8	582'5	585'0	611'6	606'0	598'33
593'8	593'8	596'6	595'8	592'2	601'5	599'0	599'2	595'8	600'8	598'8	601'4	601'0	605'0	605'93
603'1	603'1	594'2	591'8	595'6	602'0	598'2	601'2	601'5	605'0	605'0	605'4	607'0	613'0	603'75
614'5	614'5	607'2	604'0	606'2	607'2	607'0	606'2	607'0	607'5	610'0	610'0	609'2	610'5	605'40
605'4	605'0	606'2	606'0	599'0	595'0	625'0	584'0	593'5	599'0	605'0	610'0	610'2	613'0	616'67
618'4	618'4	615'8	615'0	616'0	618'2	618'2	620'0	605'2	599'2	602'8	606'2	608'0	613'0	612'05
—	—	—	—	—	—	—	—	—	—	—	—	—	—	612'11
610'5	610'5	603'8	603'6	605'8	596'5	608'0	600'8	605'0	609'0	610'4	612'0	617'2	617'0	610'35
620'6	620'6	609'2	613'8	614'0	615'0	614'0	613'8	613'0	616'0	617'0	619'0	618'0	611'2	607'61
613'0	613'0	605'0	619'0	619'0	604'5	590'0	596'0	611'0	610'0	614'2	610'4	594'6	620'6	615'74
614'2	613'5	616'5	617'0	618'0	619'0	610'0	615'2	612'3	615'4	617'5	604'2	610'0	616'4	618'09
628'0	628'0	628'2	625'0	623'8	622'2	620'0	616'2	613'0	614'0	617'2	621'8	623'2	624'0	618'26
625'8	625'8	613'4	611'6	606'4	636'0	616'2	610'1	—	—	—	—	—	—	615'77
—	—	—	—	—	—	—	—	621'2	621'0	620'0	620'0	626'0	627'0	610'11
614'8	616'2	620'0	620'2	620'4	623'0	615'5	614'4	617'0	616'0	615'0	612'0	614'0	614'8	614'98
606'8	612'0	612'0	616'0	611'8	612'5	611'0	613'0	617'0	616'2	616'0	615'6	616'3	619'6	615'70
618'8	625'0	624'0	623'0	614'0	620'0	615'8	616'0	613'8	620'0	614'2	620'0	622'2	624'6	623'45
613'4	619'3	619'0	622'8	621'2	618'8	616'2	617'4	614'4	618'2	622'0	622'2	622'8	622'0	—
620'0	620'0	621'5	616'8	607'2	602'0	608'6	615'0	616'0	620'0	621'2	620'0	620'0	626'0	—
632'0	629'0	—	630'2	631'5	629'9	630'2	630'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	620'5	616'0	622'0	625'0	624'0	624'8	—
608'74	608'48	604'36	604'26	602'99	602'03	602'20	598'21	598'04	601'87	602'30	605'13	608'18	610'65	602'27

TEMPERATURE OF THE BIFILAR MAGNET.

63'0	62'6	62'4	62'1	61'8	61'5	61'0	60'5	60'0	59'7	59'7	59'4	59'0	59'0	61'83
60'5	61'1	61'0	60'8	60'5	59'5	59'4	58'6	58'2	57'5	57'1	57'0	56'5	56'2	58'89
61'1	61'2	60'7	60'2	60'0	60'0	59'8	59'5	—	—	—	—	—	—	58'52
—	—	—	—	—	—	—	—	57'0	56'7	56'8	56'7	56'7	56'4	60'71
63'5	64'0	64'0	63'5	63'0	62'7	62'2	61'8	61'5	60'8	60'3	60'1	59'7	59'0	62'26
64'7	64'5	64'0	63'7	63'5	63'2	63'2	63'0	62'6	62'3	62'0	61'6	61'5	61'2	65'95
67'5	67'7	67'5	67'3	67'2	67'5	67'4	67'1	67'1	67'0	66'9	66'7	66'5	66'0	65'65
66'6	66'0	65'6	65'5	65'1	65'2	65'0	64'8	64'8	64'5	64'5	64'5	64'5	64'5	64'02
65'7	64'9	64'0	63'5	63'1	63'0	63'0	62'6	62'0	61'7	61'5	61'0	59'5	—	58'53
60'2	60'5	60'2	60'2	59'4	59'4	58'8	58'8	—	—	—	—	—	—	61'54
—	—	—	—	—	—	—	—	56'5	56'6	56'6	56'8	57'0	56'9	58'51
63'5	63'4	63'2	63'2	63'0	62'8	62'6	62'6	62'5	62'5	62'5	62'0	61'8	61'6	57'32
58'6	58'2	58'1	57'3	57'0	56'6	56'7	56'6	56'5	56'2	56'5	56'6	56'2	56'0	57'57
59'0	58'7	58'1	58'1	57'8	57'5	57'2	56'8	56'5	56'6	56'6	57'0	57'0	56'6	58'34
59'4	59'0	58'8	58'4	58'0	57'5	57'5	57'0	56'8	56'6	56'6	56'4	56'2	56'0	52'82
59'3	59'5	60'0	60'2	60'5	60'6	60'5	60'3	60'0	59'2	58'8	58'2	57'6	56'6	52'15
55'0	54'3	53'8	54'0	53'7	53'4	53'0	52'6	—	—	—	—	—	—	53'07
—	—	—	—	—	—	—	—	48'4	48'2	48'1	48'0	48'0	48'0	53'30
54'2	53'6	53'6	53'4	53'2	53'0	53'0	52'7	52'7	52'5	52'2	52'4	52'4	51'6	51'18
54'8	54'5	54'0	53'5	53'2	53'7	52'5	52'4	52'1	52'0	52'0	52'0	51'6	51'4	49'75
53'5	53'7	54'0	54'1	54'5	55'0	54'7	54'3	54'0	53'7	54'0	54'0	54'2	54'2	52'22
52'1	51'9	51'0	51'0	50'9	50'6	50'4	50'0	49'6	49'2	48'6	47'8	48'0	48'0	54'38
51'0	51'3	51'1	51'3	51'5	51'4	51'0	51'0	51'0	50'6	50'3	50'3	50'2	50'0	56'48
54'7	54'8	54'6	54'4	54'2	53'6	53'4	53'0	—	—	—	—	—	—	52'89
—	—	—	—	—	—	—	—	50'0	50'0	49'8	49'8	50'0	49'5	53'00
55'8	54'6	55'3	55'5	55'6	56'0	56'0	56'0	56'0	56'5	56'8	57'0	57'1	57'3	50'90
58'3	57'3	57'0	57'2	56'5	56'7	56'4	55'7	55'0	54'6	54'4	54'2	54'0	53'4	49'10
54'5	54'5	54'4	54'0	53'5	52'7	52'7	52'7	52'2	52'2	52'2	52'0	52'6	52'2	—
54'6	54'6	54'0	53'7	53'7	53'4	53'2	53'0	53'0	53'0	52'0	51'8	51'8	51'2	—
52'5	51'6	51'6	51'6	51'6	51'0	50'6	50'4	50'2	50'0	49'8	49'8	49'5	49'2	—
48'2	48'1	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	50'0	50'5	51'0	51'7	52'0	52'3	—
58'21	58'00	57'78	57'62	57'41	57'20	57'00	56'72	56'16	55'97	55'83	55'75	55'66	55'36	56'70

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.												
Mean (Gauss- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
NOVEMBER.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	624.2	622.0	608.0	621.8	616.0	603.0	603.5	604.6	607.8	608.0	600.0	606.0
3	617.4	613.8	611.2	600.0	607.5	600.2	605.0	606.0	605.5	605.8	612.5	601.0
4	614.0	613.5	609.2	603.4	601.5	602.0	606.6	607.0	612.0	610.0	616.0	611.2
5	618.0	618.5	613.8	607.0	602.0	598.0	600.0	601.2	606.2	612.0	611.3	611.8
6	625.0	620.0	615.0	609.2	603.0	600.2	600.0	604.2	609.2	610.2	617.8	620.0
7	622.0	622.2	619.2	614.4	607.6	604.2	605.2	607.0	601.0	599.0	601.8	593.8
8	—	—	—	—	—	—	—	—	—	—	—	—
9	617.8	616.8	612.0	607.4	605.6	600.0	595.0	598.0	600.0	608.0	611.5	611.2
10	609.0	612.0	609.0	607.5	603.0	602.0	599.0	600.0	606.0	608.0	607.0	609.2
11	614.0	612.2	608.0	603.0	600.5	596.5	598.0	599.2	605.4	609.0	602.0	608.2
12	616.6	615.0	611.0	605.2	602.2	598.4	598.0	604.2	609.4	615.4	616.2	617.2
13	618.3	620.0	616.2	610.4	603.8	603.0	603.2	610.5	614.0	622.4	614.4	616.2
14	621.8	620.8	616.2	611.0	601.1	597.0	595.0	599.2	604.0	608.0	611.0	614.0
15	—	—	—	—	—	—	—	—	—	—	—	—
16	621.2	620.2	614.0	611.0	608.0	606.2	608.6	608.0	615.0	620.0	618.0	612.0
17	620.0	618.4	611.0	613.0	613.0	620.3	602.0	593.2	603.0	597.2	597.4	591.4
18	604.5	602.0	598.0	592.2	581.8	592.0	594.0	594.2	595.5	597.9	597.9	598.6
19	604.0	602.8	599.0	595.4	592.4	598.0	603.2	608.9	617.0	615.0	611.6	617.0
20	620.2	620.8	616.0	609.0	603.5	602.0	609.0	614.0	609.0	615.3	617.0	608.0
21	621.4	619.2	614.8	608.8	602.5	598.5	602.6	607.1	610.0	614.0	618.0	619.2
22	—	—	—	—	—	—	—	—	—	—	—	—
23	628.0	626.2	622.0	617.5	612.8	610.0	611.0	616.2	621.2	626.0	628.4	631.0
24	626.5	623.0	620.0	613.4	604.8	600.2	607.0	610.8	617.2	625.8	629.2	628.2
25	625.2	625.0	627.0	624.2	624.5	615.0	624.5	621.4	632.0	639.2	643.5	641.0
26	632.2	635.5	632.0	619.0	623.4	612.2	604.0	611.2	625.5	621.0	617.5	609.5
27	642.0	633.8	630.2	628.0	635.2	627.5	620.0	617.0	625.0	636.0	637.0	636.0
28	634.5	631.0	626.0	621.2	617.9	614.0	601.0	611.5	614.0	607.5	616.5	614.4
29	—	—	—	—	—	—	—	—	—	—	—	—
30	628.5	638.6	639.5	621.0	630.8	634.0	634.6	628.0	625.4	632.8	635.5	635.8
Hourly Means	621.85	620.93	616.73	610.96	608.38	605.38	605.32	607.22	611.61	614.54	615.56	614.48
TEMPERATURE OF THE BIFILAR MAGNET.												
NOVEMBER.	°	°	°	°	°	°	°	°	°	°	°	°
2	52.4	52.6	52.8	52.8	53.0	54.1	54.7	55.1	55.3	55.9	56.4	56.5
3	56.2	56.0	56.0	56.2	56.7	57.4	58.1	58.4	58.6	58.8	58.8	58.6
4	57.5	57.0	56.2	57.0	57.7	58.0	58.5	58.7	58.9	59.0	59.2	58.8
5	53.8	53.4	54.0	54.9	55.4	56.4	57.0	57.5	58.2	59.0	59.0	59.2
6	51.9	51.5	52.0	52.0	52.5	53.2	54.0	54.8	55.2	55.8	56.5	56.5
7	53.0	53.0	52.5	52.2	53.0	53.6	54.0	54.1	54.4	55.0	55.2	55.0
8	—	—	—	—	—	—	—	—	—	—	—	—
9	56.6	57.0	57.0	57.0	57.8	58.5	58.7	59.0	59.5	59.6	60.0	60.0
10	60.0	59.6	59.4	59.0	59.9	60.5	61.0	61.6	61.5	61.9	61.3	61.0
11	59.4	59.2	59.0	59.0	59.0	59.5	59.6	59.6	59.4	59.6	60.0	59.8
12	57.5	57.1	57.0	56.7	56.5	56.8	57.0	57.2	57.4	57.8	58.2	57.9
13	57.4	57.2	56.6	56.6	56.6	56.6	56.6	56.8	56.8	57.2	57.0	56.4
14	56.0	55.6	55.2	55.0	55.5	55.6	55.8	56.3	56.1	56.6	56.8	56.5
15	—	—	—	—	—	—	—	—	—	—	—	—
16	54.9	55.1	54.5	54.4	55.2	55.5	55.8	56.0	56.1	56.5	56.5	56.6
17	55.9	55.7	55.5	56.0	56.6	56.7	56.9	57.2	57.4	57.7	57.7	57.2
18	57.0	57.0	56.7	56.8	57.2	58.0	59.0	59.8	60.0	59.9	59.4	58.9
19	57.4	57.0	56.6	56.4	55.8	56.0	56.3	55.6	54.9	54.9	54.6	54.4
20	50.6	50.4	50.0	50.0	51.0	51.5	51.8	52.2	52.5	53.0	52.8	52.5
21	52.3	51.6	51.3	50.4	50.6	51.0	51.0	51.5	51.5	52.0	51.3	51.3
22	—	—	—	—	—	—	—	—	—	—	—	—
23	45.6	45.7	45.3	45.5	46.0	47.0	47.5	48.2	49.0	49.4	49.4	48.6
24	50.0	50.0	49.8	49.2	49.7	50.3	50.7	51.2	51.0	51.0	51.0	50.4
25	46.7	46.4	45.0	45.0	43.6	42.2	41.8	41.0	40.3	40.2	39.8	39.5
26	39.6	38.8	38.2	38.6	39.5	39.6	39.8	40.0	39.6	39.5	39.5	39.6
27	39.6	39.2	38.6	39.3	39.6	39.7	40.6	41.5	42.0	42.3	42.7	43.0
28	49.4	49.4	49.4	49.6	49.6	49.6	49.8	49.9	50.5	51.2	51.5	51.4
29	—	—	—	—	—	—	—	—	—	—	—	—
30	42.5	42.6	43.0	43.0	43.2	43.5	43.5	43.5	43.2	43.3	43.5	43.5
Hourly Means	52.53	52.32	52.06	52.10	52.45	52.83	53.18	53.47	53.57	53.89	53.92	53.72

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

[illegible]

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Observ- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
1	636'6	641'4	638'7	637'2	630'8	627'8	628'2	623'0	630'8	639'0	643'0	641'0
2	641'2	641'9	634'0	636'0	633'9	625'1	628'4	630'0	627'5	631'5	630'0	631'5
3	628'7	625'5	623'0	618'0	615'9	611'5	613'0	617'0	622'0	625'5	626'2	628'0
4	630'0	632'7	632'5	629'0	620'0	617'0	619'0	622'2	628'0	627'0	634'0	632'8
5	633'0	631'7	629'0	625'8	620'4	618'2	622'0	622'0	628'8	632'6	630'7	633'7
6	—	—	—	—	—	—	—	—	—	—	—	—
7	643'0	639'0	637'6	635'2	629'0	625'8	621'4	622'5	628'4	635'1	640'4	639'4
8	635'0	638'2	634'2	630'8	624'8	618'6	615'6	618'0	625'0	635'8	638'2	635'2
9	634'8	636'2	634'2	631'0	626'0	622'5	622'0	622'0	625'0	634'5	626'0	628'2
10	633'7	629'0	629'0	628'0	620'0	616'0	610'0	610'4	622'0	623'2	622'8	625'0
11	636'0	633'2	635'6	631'4	633'0	625'2	618'4	622'5	625'8	631'0	630'6	631'0
12	630'4	636'0	637'4	635'0	632'0	629'7	626'5	625'2	633'0	634'0	639'0	634'2
13	—	—	—	—	—	—	—	—	—	—	—	—
14	655'0	653'2	652'0	654'4	652'0	647'8	643'6	645'8	648'4	655'0	655'9	646'0
15	652'6	647'6	646'5	646'0	642'3	638'3	636'0	641'0	645'0	646'0	647'1	648'0
16	649'0	650'0	649'0	647'0	643'0	638'0	638'0	640'0	642'2	643'0	645'2	647'8
17	645'0	645'0	642'2	638'4	636'6	635'0	637'3	639'9	643'2	645'2	647'0	645'0
18	647'6	646'8	642'6	644'0	641'0	636'2	637'4	638'8	645'5	647'9	642'0	639'8
19	643'4	640'4	638'8	635'8	634'4	631'0	627'0	632'5	635'4	638'0	641'0	641'5
20	—	—	—	—	—	—	—	—	—	—	—	—
21	649'1	646'8	645'8	644'0	640'0	637'4	639'5	643'0	646'5	648'0	650'0	652'4
22	647'0	647'0	646'0	647'0	640'0	638'0	643'5	647'3	651'0	654'2	653'0	654'0
23	650'0	656'0	649'8	648'4	643'0	634'0	632'2	637'0	635'2	626'2	623'0	631'1
24	640'0	642'5	640'2	635'0	625'0	620'0	622'2	616'6	632'2	633'4	641'5	642'0
25	—	—	—	—	—	—	—	—	—	—	—	—
26	651'0	651'2	637'0	637'0	622'0	627'0	628'0	630'4	635'2	635'4	641'4	640'0
27	—	—	—	—	—	—	—	—	—	—	—	—
28	635'8	636'0	632'0	628'2	627'7	622'2	617'6	622'8	626'8	631'5	634'5	633'9
29	641'0	639'2	637'8	635'4	629'8	625'6	629'0	629'0	637'0	639'6	641'6	640'7
30	638'8	637'0	637'5	636'3	624'3	618'0	620'0	625'0	630'0	633'8	633'5	633'5
31	637'0	634'0	631'4	627'8	624'4	621'0	621'0	625'2	632'0	634'7	634'0	637'3
Hourly Means	640'95	640'67	638'22	636'23	631'20	627'19	626'65	628'82	633'57	636'87	638'06	638'23
TEMPERATURE OF THE BIPOLAR MAGNET.												
1	41'2	40'6	40'0	39'6	39'5	39'8	40'2	40'4	40'5	41'1	41'6	41'8
2	43'6	43'8	43'7	44'1	45'0	46'1	46'4	46'6	47'3	48'2	48'6	49'5
3	50'8	49'9	48'6	48'3	47'9	48'0	48'2	48'0	47'6	48'0	47'6	47'6
4	44'0	44'0	44'0	44'0	44'2	44'6	45'0	45'2	45'5	45'7	46'3	46'5
5	47'0	47'0	46'9	46'8	47'2	48'0	48'0	48'4	48'6	49'0	49'2	48'8
6	—	—	—	—	—	—	—	—	—	—	—	—
7	43'5	44'0	43'7	43'6	43'7	44'5	45'0	45'4	45'2	45'7	46'2	46'7
8	49'6	49'5	48'8	48'5	49'2	49'6	49'4	49'2	49'2	49'4	49'4	49'0
9	47'5	47'0	46'7	46'2	46'0	46'6	47'2	48'0	48'0	48'0	48'0	48'0
10	45'5	45'5	45'1	44'4	44'5	45'7	46'2	46'7	47'0	48'0	48'8	48'8
11	46'0	45'6	45'3	45'7	46'8	47'0	46'3	46'2	45'8	45'6	45'8	45'1
12	43'0	42'6	42'0	41'2	40'4	40'4	40'4	40'4	40'2	40'5	40'5	40'7
13	—	—	—	—	—	—	—	—	—	—	—	—
14	31'4	31'7	32'0	32'0	32'6	33'0	33'6	34'5	35'4	36'2	36'8	36'5
15	34'0	33'5	33'3	33'9	34'9	35'2	36'8	37'5	38'4	39'5	39'7	39'8
16	37'9	38'2	37'3	36'7	38'0	39'0	40'0	40'6	41'2	40'7	41'3	41'4
17	39'6	39'5	39'0	39'8	40'7	41'8	42'8	43'0	42'6	42'7	42'7	42'6
18	38'8	38'7	38'3	38'0	38'2	39'2	40'0	40'8	41'8	42'4	42'6	43'0
19	42'2	41'8	41'8	42'0	43'0	43'1	43'4	43'8	43'7	43'7	43'7	43'5
20	—	—	—	—	—	—	—	—	—	—	—	—
21	38'5	38'5	38'0	38'0	37'7	38'2	38'9	39'9	40'7	41'5	41'7	41'2
22	40'3	40'5	39'5	38'9	35'6	34'6	34'0	33'6	33'6	34'0	35'0	36'0
23	38'5	38'0	36'6	36'7	37'3	37'3	37'0	38'0	39'2	40'6	41'3	41'3
24	41'8	41'7	41'6	41'4	42'0	43'0	44'0	44'5	44'6	44'8	44'8	44'8
25	—	—	—	—	—	—	—	—	—	—	—	—
26	39'0	39'2	39'0	38'5	39'4	40'4	41'0	41'5	41'4	41'5	41'0	41'5
27	—	—	—	—	—	—	—	—	—	—	—	—
28	46'5	46'5	46'0	46'0	46'2	46'5	46'0	45'8	45'6	45'6	45'5	45'3
29	43'4	42'8	42'0	41'4	41'5	41'8	42'2	42'0	42'1	42'7	43'1	43'4
30	43'8	44'0	44'7	45'2	45'6	46'1	46'7	48'0	47'5	48'0	48'0	47'6
31	48'6	48'6	48'5	46'8	47'4	48'0	47'6	48'5	48'5	49'0	49'1	49'1
Hourly Means	42'51	42'41	42'02	41'83	42'10	42'63	42'93	43'33	43'51	43'93	44'17	44'21

* Christmas Day.

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

0°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
633'0	641'0	633'2	631'0	636'8	642'0	634'0	646'0	632'0	634'2	630'0	636'2	634'2	637'6	635'20
630'0	631'5	626'9	630'9	629'0	628'6	630'0	628'2	625'0	625'4	626'6	625'2	625'2	628'3	630'01
626'2	628'0	627'2	629'2	631'2	636'2	637'8	631'0	627'0	612'5	618'7	626'2	629'0	630'2	624'60
644'0	632'8	630'6	632'0	630'8	627'2	634'3	629'8	628'0	630'9	632'0	633'8	633'8	633'8	629'18
630'7	633'7	629'9	631'0	630'5	630'6	631'0	633'2	—	—	—	—	—	—	631'67
—	—	—	—	—	—	—	—	638'2	641'0	641'4	641'2	642'0	642'2	634'22
40'4	639'4	638'2	638'0	636'8	635'8	635'0	634'7	633'6	634'0	633'6	635'2	635'0	634'8	628'45
38'2	635'2	628'2	624'0	621'0	621'2	620'8	620'6	626'6	630'0	633'8	638'6	634'2	634'4	623'55
26'0	628'2	625'0	625'6	595'6	605'8	607'8	618'0	617'2	623'2	626'8	627'1	629'6	621'0	623'36
22'8	625'0	626'2	630'8	624'8	611'6	614'7	620'2	623'3	630'2	627'6	627'6	623'5	635'0	630'20
30'6	631'0	629'9	627'0	618'4	625'0	632'4	638'0	633'0	635'0	637'0	633'0	631'5	631'0	638'72
39'0	634'2	637'4	642'0	643'6	639'2	634'5	640'5	—	—	—	—	—	—	650'37
—	—	—	—	—	—	—	—	648'4	648'6	650'0	648'4	649'0	655'4	650'77
55'9	646'0	653'5	649'0	651'0	651'2	651'4	648'3	649'0	651'2	647'8	645'6	653'2	648'7	645'69
47'1	648'0	647'4	641'0	641'0	648'8	648'2	647'2	648'8	647'2	647'0	647'8	647'8	648'0	644'81
45'2	647'8	647'4	645'4	645'4	646'9	644'1	644'7	644'7	644'9	644'7	645'0	645'0	645'0	642'92
47'0	645'0	646'1	645'1	638'6	643'0	643'1	643'0	643'2	644'8	644'8	644'0	647'0	647'6	642'05
42'0	639'8	640'0	639'0	639'0	645'5	643'0	641'3	641'1	642'0	642'4	642'2	642'2	642'0	640'92
41'0	641'5	642'5	642'8	642'0	642'7	643'3	640'2	—	—	—	—	—	—	644'95
—	—	—	—	—	—	—	—	646'4	648'0	647'8	648'2	648'8	650'2	646'33
50'0	652'4	652'0	641'2	643'3	641'2	642'5	642'5	643'0	644'9	646'3	646'9	646'5	646'0	632'20
53'0	654'0	647'8	647'5	646'8	644'1	644'0	641'6	643'5	646'2	646'0	644'2	645'6	649'0	636'37
23'0	631'1	629'0	587'0	611'0	617'5	623'0	635'0	636'5	636'5	633'0	634'0	632'6	632'3	634'93
41'5	642'0	640'2	636'5	631'4	631'0	641'0	633'0	—	—	—	—	—	—	636'54
—	—	—	—	—	—	—	—	638'0	640'6	641'8	637'0	638'2	639'0	632'20
41'4	640'0	639'2	638'0	641'0	640'1	640'1	633'9	—	—	—	—	—	—	636'37
—	—	—	—	—	—	—	—	640'7	633'0	634'9	633'0	633'4	634'0	632'70
34'5	633'9	630'7	633'7	634'5	635'2	631'0	635'4	635'0	637'5	638'5	635'0	636'2	638'0	632'70
39'6	641'6	642'0	641'0	640'2	638'0	635'5	637'5	639'0	636'4	636'8	637'4	640'0	639'0	632'00
33'5	633'5	633'0	633'0	633'5	634'2	633'2	635'0	633'6	635'8	638'4	635'5	635'8	636'2	636'37
34'0	637'3	637'0	635'2	633'0	633'0	633'2	632'8	632'0	632'4	635'0	634'8	633'8	636'0	636'37
38'00	638'23	636'94	634'50	633'47	634'45	635'07	635'83	636'41	636'89	637'90	637'81	638'20	639'02	635'55

TEMPERATURE OF THE BIPOLAR MAGNET.

41'6	41'8	41'5	41'2	41'2	42'0	42'0	42'2	42'5	42'4	42'5	43'0	43'7	43'4	41'41
48'6	49'5	50'0	50'5	50'9	50'7	50'9	51'3	51'8	52'0	51'8	51'6	51'5	51'5	48'64
47'6	47'6	47'6	47'0	46'8	46'5	46'2	46'0	45'6	45'0	44'6	44'6	44'6	44'4	47'06
46'3	46'5	46'5	46'8	47'2	47'6	47'7	47'5	47'4	47'1	46'9	47'4	47'4	47'2	46'07
49'2	48'8	48'9	48'5	48'5	48'2	48'0	48'0	—	—	—	—	—	—	46'47
—	—	—	—	—	—	—	—	40'0	40'7	41'5	42'5	42'7	43'0	46'55
46'2	46'7	46'7	47'5	47'7	47'6	48'0	48'4	48'5	48'6	49'0	49'2	49'4	49'5	48'74
49'4	49'0	49'0	48'8	48'2	48'2	48'2	47'8	48'2	48'2	47'8	47'8	48'2	47'7	47'27
48'0	48'0	48'5	48'5	48'2	48'0	47'8	47'6	47'8	47'3	46'6	46'0	45'6	45'4	46'79
48'8	48'8	48'3	48'3	48'2	48'0	47'8	47'0	46'7	46'6	46'4	46'6	46'8	46'1	44'94
45'8	45'1	44'8	44'5	44'2	44'0	44'0	44'0	44'0	43'8	43'5	43'8	43'5	43'2	38'59
40'5	40'7	40'7	40'4	40'2	40'2	40'5	40'5	—	—	—	—	—	—	34'67
—	—	—	—	—	—	—	—	31'8	31'9	32'0	32'2	32'0	31'4	37'73
36'8	36'5	36'5	36'0	35'6	35'8	36'0	35'8	35'6	35'4	35'1	35'0	35'1	34'6	40'15
39'7	39'8	40'2	40'0	40'2	40'1	40'0	39'4	39'0	38'7	38'1	37'6	37'5	37'3	40'85
41'3	41'4	41'6	41'6	41'5	41'5	41'5	41'5	41'0	40'4	40'0	40'3	40'4	39'9	41'65
42'7	42'6	42'6	42'4	42'0	41'2	41'0	40'2	39'8	39'0	38'8	38'9	39'0	38'8	41'60
42'6	43'0	43'1	43'3	43'4	43'2	43'0	43'0	43'3	43'6	43'3	43'0	43'0	42'7	39'76
43'7	43'5	43'5	43'5	43'5	43'4	43'4	43'1	—	—	—	—	—	—	37'39
—	—	—	—	—	—	—	—	35'7	36'1	36'6	37'6	38'4	38'0	42'72
41'7	41'2	41'0	40'7	40'5	40'1	40'2	40'0	39'8	39'5	39'9	40'0	40'0	39'7	42'37
35'0	36'0	37'0	38'0	38'6	38'2	38'2	38'7	38'9	38'7	38'7	38'6	39'2	38'9	44'71
41'3	41'3	42'0	41'8	41'4	41'6	42'0	42'1	42'0	42'0	42'3	42'3	42'2	42'2	42'68
44'8	44'8	45'0	45'8	46'4	46'2	46'5	46'2	—	—	—	—	—	—	46'74
—	—	—	—	—	—	—	—	38'0	38'0	38'0	38'5	38'7	39'0	48'70
41'0	41'5	41'6	42'0	42'4	43'6	44'2	44'4	—	—	—	—	—	—	48'24
—	—	—	—	—	—	—	—	45'3	45'6	45'7	45'9	46'4	46'5	42'37
45'5	45'3	44'8	43'6	43'5	43'2	43'2	43'0	43'0	43'2	43'5	43'5	43'5	43'5	44'71
43'1	43'4	43'2	42'8	43'0	42'4	42'5	42'8	43'0	43'0	43'2	43'3	43'3	43'4	42'68
48'0	47'6	47'2	47'0	46'7	46'7	46'7	46'4	46'8	46'9	47'4	48'0	48'2	48'5	46'74
49'1	49'1	49'7	49'6	49'4	49'4	49'2	49'0	48'8	48'6	49'0	48'7	48'8	48'8	48'70
44'17	44'21	44'29	44'24	44'23	44'14	44'18	44'07	42'86	42'78	42'78	42'92	43'04	42'87	43'25

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 53.												
Mean Observing Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JANUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	636'2	636'0	636'0	635'0	631'0	628'0	627'0	629'2	634'3	638'0	641'0	640'4
	632'5	638'0	633'2	633'0	629'6	620'0	620'0	622'4	630'8	637'0	636'7	640'9
	—	—	—	—	—	—	—	—	—	—	—	—
	641'6	640'8	640'5	631'2	624'8	618'6	619'2	625'0	633'8	639'5	641'0	637'0
	634'2	638'2	640'4	636'4	624'0	624'0	622'0	624'0	628'0	633'0	635'2	634'0
	635'8	639'2	640'6	633'0	621'0	614'2	610'6	614'0	619'5	633'5	636'2	638'3
	635'0	634'2	634'3	629'0	615'0	616'0	616'0	624'0	628'6	635'0	638'0	635'4
	647'5	645'0	647'0	640'2	630'0	625'2	629'4	637'5	643'0	645'4	647'5	645'2
	655'0	655'0	653'2	650'0	639'5	637'5	641'2	641'0	648'5	648'0	651'5	652'0
	—	—	—	—	—	—	—	—	—	—	—	—
	653'8	652'2	654'0	649'0	636'0	638'8	641'2	647'0	650'0	658'0	657'0	662'0
	660'5	658'8	653'5	661'0	654'0	642'0	641'5	638'5	646'0	652'0	658'2	658'8
	646'0	648'0	653'0	647'0	646'0	642'0	633'0	625'2	634'8	635'0	643'0	645'0
	636'0	638'5	638'0	637'4	631'5	623'0	620'4	627'4	632'2	635'4	630'2	637'2
	632'0	631'8	632'0	623'2	618'5	614'2	619'5	624'8	626'2	629'5	630'1	630'2
	627'5	630'2	631'4	629'1	621'6	620'2	619'0	622'5	624'0	629'5	632'1	632'0
	—	—	—	—	—	—	—	—	—	—	—	—
	650'0	650'5	648'3	643'0	636'1	633'0	634'0	639'0	642'0	644'0	647'0	645'6
	647'0	647'0	642'0	634'0	633'5	632'5	636'8	639'3	642'0	646'7	649'0	651'0
	664'0	648'5	662'0	659'8	647'0	649'4	650'0	650'0	650'5	647'5	642'0	640'0
	650'4	649'5	642'5	628'0	620'4	629'8	631'0	630'6	635'0	634'5	642'1	640'0
	651'5	653'0	650'4	658'8	650'2	650'8	650'2	652'5	650'1	655'0	650'5	654'5
	652'0	655'0	653'2	649'0	643'5	642'0	643'0	646'0	647'0	650'0	648'0	648'0
	—	—	—	—	—	—	—	—	—	—	—	—
	648'5	648'0	646'5	644'0	637'5	635'0	637'0	640'0	647'0	650'8	649'2	648'8
	646'0	646'5	645'2	638'0	630'2	630'0	629'8	633'5	637'5	641'2	642'7	637'9
	644'0	644'7	645'2	644'0	639'2	638'2	639'2	640'0	642'0	645'2	648'0	649'0
	650'0	649'0	651'4	649'2	648'0	644'4	644'1	646'4	647'0	648'0	652'0	651'9
	643'6	643'0	648'1	638'0	648'2	641'0	638'1	641'8	632'0	637'0	637'0	624'0
	637'5	637'0	637'0	642'0	642'8	630'0	612'0	608'0	636'0	654'0	627'2	621'6
	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	644'54	644'52	644'57	640'86	634'58	631'53	630'97	633'45	637'99	642'41	642'78	642'33
TEMPERATURE OF THE BIFILAR MAGNET.												
JANUARY.	47'5	47'5	47'6	48'4	48'5	48'8	47'8	48'3	47'8	47'5	47'5	47'6
	46'9	46'9	46'0	45'5	45'8	46'0	46'2	46'3	46'7	47'0	47'2	47'1
	—	—	—	—	—	—	—	—	—	—	—	—
	43'0	43'0	43'0	42'8	42'7	43'2	43'6	44'4	45'0	45'5	45'6	45'6
	47'0	46'8	45'8	44'8	46'0	46'0	44'0	45'4	46'5	47'4	47'2	46'6
	45'5	45'5	45'1	44'8	45'5	46'1	46'4	46'7	47'0	48'0	48'6	49'0
	47'4	47'4	46'8	46'0	46'0	46'5	46'3	45'5	44'8	45'0	44'8	44'2
	37'2	36'9	36'0	36'0	36'0	36'0	35'5	35'0	34'6	34'8	35'1	34'7
	33'7	33'5	33'2	33'0	33'6	34'5	35'5	35'7	36'0	36'6	37'0	36'0
	—	—	—	—	—	—	—	—	—	—	—	—
	28'6	28'7	28'5	28'4	29'9	30'4	29'2	28'5	28'0	28'0	27'6	29'3
	28'5	28'1	28'8	30'0	31'4	32'4	33'0	33'5	34'5	35'7	36'9	37'2
	36'0	36'0	35'8	35'9	36'9	39'0	40'5	41'3	42'0	43'2	43'6	43'4
	44'0	45'4	45'5	45'6	46'2	47'5	48'0	48'4	48'3	48'3	48'3	48'1
	49'4	49'2	48'6	48'5	48'3	48'8	49'6	50'5	50'5	50'7	50'8	50'6
	50'5	50'1	49'8	49'0	48'5	48'1	46'1	46'4	46'3	45'5	44'7	44'1
	—	—	—	—	—	—	—	—	—	—	—	—
	37'7	38'0	38'0	37'5	38'5	38'7	40'6	41'1	41'4	41'9	42'3	42'5
	37'4	37'4	37'2	36'4	36'0	35'7	35'5	35'5	35'7	35'8	35'6	35'5
	33'0	33'2	32'8	33'5	34'4	35'0	35'7	36'0	36'2	36'6	37'0	38'0
	37'4	38'0	37'4	37'0	36'2	36'4	35'5	35'7	36'0	35'9	35'4	34'6
	30'5	30'6	30'5	31'0	30'9	31'4	31'7	32'0	32'0	32'5	32'5	32'9
	32'4	32'9	33'1	33'6	34'7	36'0	37'3	38'5	39'0	39'5	39'8	40'5
	—	—	—	—	—	—	—	—	—	—	—	—
	35'8	36'0	35'6	36'3	37'5	38'0	38'5	38'6	39'5	40'2	40'2	40'2
	41'1	41'5	41'8	42'0	42'7	43'7	44'4	44'7	44'8	44'8	44'6	44'5
	40'0	40'0	39'5	39'1	38'9	39'0	38'6	39'2	37'8	37'6	37'5	36'8
	34'6	33'8	33'8	33'5	34'0	35'0	35'9	36'5	37'3	38'4	39'4	39'4
	39'0	39'6	39'6	39'4	39'8	40'9	41'4	42'0	42'7	43'1	43'0	42'7
	40'4	40'4	39'5	39'0	40'0	40'9	40'6	40'8	40'8	41'0	40'8	40'5
	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	39'44	39'48	39'20	39'12	39'57	40'15	40'28	40'63	40'82	41'17	41'27

* Mimed.

* Twenty minutes late.

1° 63.

10h.

11h.

Sc. Div.

Sc. Div.

41° 0

640° 4

36° 7

640° 9

41° 0

637° 0

35° 2

634° 0

36° 2

638° 3

38° 0

635° 4

47° 5

645° 2

51° 5

652° 0

37° 0

662° 0

55° 8

658° 8

43° 0

645° 0

33° 2

637° 2

33° 1

630° 2

34° 0

645° 6

34° 0

651° 0

34° 0

640° 0

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HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
639° 2	638° 4	641° 2	637° 9	637° 0	636° 1	634° 0	633° 9	635° 0	635° 0	632° 6	636° 0	635° 35
636° 5	633° 0	635° 8	635° 0	633° 9	634° 0	—	—	—	—	—	—	633° 86
—	636° 0	631° 0	631° 0	636° 0	634° 0	640° 0	639° 0	635° 0	635° 0	641° 0	640° 4	633° 02
637° 4	626° 5	613° 0	620° 2	626° 0	631° 0	629° 0	633° 0	630° 0	632° 0	633° 0	631° 2	631° 62
631° 3	626° 5	613° 0	620° 2	626° 0	631° 0	635° 2	635° 6	632° 4	633° 0	636° 2	635° 0	629° 07
634° 0	633° 6	613° 7	624° 4	628° 8	633° 0	631° 2	631° 0	632° 1	632° 9	633° 2	634° 0	633° 64
634° 4	631° 2	631° 0	636° 8	637° 1	636° 1	638° 2	640° 0	641° 4	643° 0	644° 6	647° 0	646° 64
649° 3	652° 1	654° 1	655° 1	655° 9	654° 0	653° 8	651° 0	654° 0	652° 0	653° 0	652° 2	650° 09
650° 0	648° 5	653° 0	651° 5	648° 0	646° 2	—	—	—	—	—	—	654° 57
—	—	—	—	—	—	653° 8	656° 0	654° 4	656° 5	656° 0	655° 8	649° 96
664° 5	662° 2	662° 0	661° 2	660° 4	658° 2	—	654° 8 ^b	656° 0	657° 3	658° 5	661° 0	641° 32
654° 0	644° 2	639° 2	653° 2	648° 4	645° 4	646° 5	651° 1 ^c	649° 0	650° 2	650° 0	640° 0	631° 62
641° 8	642° 0	642° 6	613° 3	644° 1	642° 2	640° 0	638° 2	638° 4	640° 0	641° 0	640° 0	627° 72
637° 3	636° 1	626° 1	623° 0	628° 2	627° 4	630° 2	630° 0	631° 5	634° 0	635° 0	632° 8	634° 53
630° 0	630° 0	630° 5	631° 0	629° 0	629° 0	629° 2	630° 0	630° 3	631° 6	629° 0	623° 8	643° 43
634° 1	635° 0	635° 0	631° 3	637° 4	637° 4	—	—	—	—	—	—	648° 07
—	—	—	—	—	—	648° 2	648° 2	649° 8	650° 4	651° 8	651° 0	645° 68
645° 2	646° 0	645° 2	643° 2	642° 0	641° 6	641° 4	642° 4	644° 0	645° 1	646° 8	647° 0	642° 55
652° 2	652° 8	653° 0	656° 0	653° 3	653° 8	656° 2	656° 6	657° 0	653° 0	655° 0	654° 0	651° 31
646° 5	643° 1	645° 0	646° 4	645° 0	642° 0	645° 0	647° 0	647° 0	647° 4	645° 8	642° 6	647° 97
644° 2	646° 2	647° 8	650° 0	649° 0	650° 0	647° 5	649° 0	651° 0	651° 2	649° 4	652° 2	645° 21
651° 0	651° 5	651° 0	651° 0	650° 4	648° 0	650° 2	646° 8	647° 2	650° 0	653° 2	650° 7	637° 25
648° 0	644° 6	641° 8	646° 0	645° 4	643° 0	—	—	—	—	—	—	645° 68
—	—	—	—	—	—	649° 6	650° 3	651° 2	651° 2	651° 5	652° 0	646° 14
647° 8	647° 0	647° 8	647° 8	645° 8	645° 0	645° 2	645° 2	645° 0	644° 2	645° 0	647° 0	636° 02
632° 0	634° 0	632° 1	633° 0	633° 0	636° 2	638° 0	638° 0	637° 0	639° 0	642° 0	643° 2	628° 38
650° 0	646° 0	646° 0	644° 2	646° 2	648° 0	649° 8	650° 2	649° 3	649° 0	649° 2	649° 8	—
654° 0	653° 7	643° 0	642° 7	641° 2	646° 0	644° 0	638° 4	640° 0	635° 8	640° 4	646° 8	—
642° 0	631° 4	631° 0	630° 0	628° 2	629° 0	631° 6	631° 1	631° 4	633° 9	636° 1	637° 0	—
613° 0	632° 2	615° 4	610° 0	614° 0	622° 0	—	—	—	—	—	—	—
—	—	—	—	—	—	626° 0	628° 0	629° 2	634° 0	635° 2	637° 0	—
642° 78	642° 33	—	—	—	—	—	—	—	—	—	—	—
612° 30	641° 55	640° 13	640° 05	640° 14	640° 33	641° 27	642° 11	642° 25	642° 95	644° 02	643° 94	640° 48

TEMPERATURE OF THE BIPOLAR MAGNET.

48°0	47°6	47°4	45°9	45°9	45°6	45°6	45°9	46°4	46°8	47°0	46°9	47°24
48°1	47°6	47°6	47°2	47°0	46°7	—	—	—	—	—	—	—
46°2	46°0	46°6	46°5	47°3	47°1	47°0	47°5	48°0	48°0	47°6	47°6	45°53
47°0	47°0	47°0	47°0	47°0	46°7	46°6	46°4	46°2	46°2	46°0	45°6	46°84
49°5	49°0	48°4	47°6	47°0	46°5	46°5	46°5	47°1	47°3	47°3	47°2	47°00
43°6	42°5	41°8	41°6	41°1	40°2	39°5	39°5	39°5	40°4	40°1	38°5	43°29
34°6	34°2	33°8	33°5	33°3	32°5	32°4	32°6	32°9	33°0	33°3	33°5	34°47
36°4	35°7	36°0	35°2	35°2	35°5	—	—	—	—	—	—	—
30°5	31°0	31°5	31°3	30°8	30°4	—	29°2	29°2	29°2	29°0	28°7	33°63
37°5	37°0	36°4	36°3	35°7	35°6	36°1	36°0	35°7	36°1	36°1	35°8	29°61
43°5	43°2	42°7	42°6	42°5	42°8	43°0	43°2	43°2	44°0	44°6	44°6	41°40
48°8	48°8	48°9	49°4	49°5	49°5	49°5	49°4	49°4	49°5	49°5	49°5	48°18
51°0	51°0	51°4	51°4	51°5	51°5	51°5	51°2	51°2	51°5	51°3	51°0	50°46
43°5	42°9	41°6	40°8	40°3	40°0	—	—	—	—	—	—	—
—	—	—	—	—	—	34°2	34°6	35°0	35°5	36°3	37°0	42°95
43°0	42°8	42°6	42°5	42°0	41°8	41°2	40°5	40°5	40°0	39°2	39°0	40°55
35°7	35°2	35°3	35°3	34°7	33°5	33°5	33°2	33°0	33°4	33°5	33°0	35°12
38°6	38°5	38°5	38°2	38°4	38°0	38°4	39°0	38°6	38°0	37°6	37°6	36°70
35°4	35°1	33°7	33°6	33°5	33°0	32°8	32°6	32°0	31°5	30°7	30°4	34°57
33°5	33°6	33°0	32°7	32°2	31°8	31°8	31°8	31°7	31°6	31°9	31°9	31°92
41°2	40°7	40°7	40°6	40°5	40°4	—	—	—	—	—	—	—
—	—	—	—	—	—	34°0	34°3	34°6	35°0	35°5	35°7	37°10
40°5	40°4	40°8	41°3	41°3	40°6	40°6	40°7	40°8	40°9	41°1	41°0	39°43
44°7	44°0	43°3	42°2	42°0	42°0	42°4	41°8	41°0	40°5	40°2	40°0	42°70
37°2	37°0	37°0	36°5	36°5	37°0	37°0	37°0	36°7	35°7	35°2	34°4	37°55
40°4	40°1	40°4	40°6	39°8	39°6	39°4	39°0	38°7	38°5	38°8	38°5	37°73
43°4	43°0	43°2	42°8	42°5	42°0	41°6	40°6	40°4	40°2	40°6	40°6	41°42
40°3	40°0	40°0	38°5	38°5	38°2	—	—	—	—	—	—	—
—	—	—	—	—	—	35°7	35°7	35°7	36°0	36°4	37°0	39°03
41°62	41°30	41°14	40°81	40°62	40°33	39°60	39°22	39°23	39°32	39°31	39°15	40°17

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
FEBRUARY.												
1	639'3	640'3	637'3	634'3	617'5	633'0	635'6	637'3	637'5	636'3	634'6	633'4
2	628'5	627'3	628'7	626'8	623'8	622'1	622'7	625'7	628'1	629'3	629'5	629'3
3	626'0	622'5	612'2	617'8	617'8	620'0	619'2	622'0	623'1	626'8	624'0	629'0
4	641'6	638'7	632'2	631'8	629'0	629'2	632'0	640'0	641'0	648'2	650'0	648'2
5	648'0	648'4	643'5	640'5	637'0	639'0	642'0	650'0	650'3	650'2	650'3	650'0
6	642'0	634'5	637'0	632'0	609'8	620'0	626'4	626'0	635'0	626'2	633'8	623'6
7	—	—	—	—	—	—	—	—	—	—	—	—
8	639'3	634'0	622'0	620'0	630'8	626'4	622'8	624'2	624'0	630'0	623'1	627'8
9	633'0	631'0	626'0	618'0	617'0	614'7	617'5	622'0	619'2	616'0	624'0	622'0
10	633'2	632'5	629'0	626'8	624'6	622'0	621'0	620'0	624'0	622'0	629'0	632'4
11	636'0	633'9	635'8	626'8	623'0	626'0	624'0	624'3	626'0	630'0	633'8	638'0
12	640'0	641'0	642'5	636'0	626'0	625'8	625'0	630'2	630'8	628'5	630'2	631'4
13	640'0	641'2	640'0	640'0	638'3	637'2	636'4	637'0	637'9	640'1	638'8	639'0
14	—	—	—	—	—	—	—	—	—	—	—	—
15	648'8	649'6	642'5	639'3	637'3	639'0	640'1	641'2	643'0	646'0	636'2	639'5
16	649'0	648'2	631'0	638'0	637'4	635'8	616'0	614'0	649'0	649'0	647'6	636'0
17	644'2	642'4	639'0	631'5	629'2	626'0	631'0	638'4	637'7	639'4	640'0	637'6
18	640'2	638'0	636'5	641'0	635'7	638'2	642'2	639'2	643'2	633'2	638'5	637'0
19	632'0	636'3	632'0	627'2	622'1	620'6	623'2	628'8	635'0	636'0	634'5	634'5
20	634'2	632'0	626'2	625'9	624'1	622'4	625'1	629'8	631'0	633'0	637'5	638'5
21	—	—	—	—	—	—	—	—	—	—	—	—
22	630'1	641'4	618'8	641'0	612'5	628'7	624'0	621'2	625'0	627'0	639'0	634'0
23	636'0	636'0	630'5	625'0	625'0	620'8	620'8	624'0	636'0	636'5	639'0	642'0
24	619'5	648'0	641'5	642'2	643'2	633'0	624'2	630'0	610'0	634'6	631'5	643'0
25	623'5	634'0	635'2	637'4	610'3	625'4	616'8	617'4	613'2	631'1	642'8	630'2
26	633'4	630'2	628'0	626'4	620'0	619'0	618'9	621'5	622'2	634'0	636'0	624'5
27	628'0	626'2	626'0	620'2	612'0	616'5	613'8	622'5	623'1	629'9	633'0	631'2
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	636'90	636'98	632'22	631'08	626'39	626'70	627'11	629'86	631'18	633'89	635'72	634'67

TEMPERATURE OF THE BIFILAR MAGNET												
	°	°	°	°	°	°	°	°	°	°	°	°
FEBRUARY.												
1	37'5	37'9	38'4	38'6	38'7	39'0	39'8	41'0	41'8	42'6	43'1	43'3
2	44'7	44'6	44'6	45'0	45'5	46'5	47'5	48'0	48'3	48'5	48'9	49'0
3	49'5	49'1	49'0	49'0	49'4	49'4	49'4	49'2	49'0	48'4	47'0	45'8
4	36'0	35'2	34'6	34'4	34'9	35'4	36'1	37'5	37'9	39'2	39'5	39'5
5	35'4	35'4	34'5	35'5	36'2	37'0	38'0	39'2	40'0	41'0	41'7	41'6
6	38'0	38'0	38'5	39'3	40'0	40'3	40'5	41'2	41'8	42'5	43'5	44'4
7	—	—	—	—	—	—	—	—	—	—	—	—
8	43'5	43'5	43'3	43'6	43'9	44'6	45'2	45'5	45'4	45'9	46'0	45'9
9	46'4	46'2	46'2	46'8	47'2	47'4	47'5	47'4	47'2	47'3	47'6	47'0
10	44'5	45'9	45'7	45'2	45'5	46'2	46'5	47'1	47'2	47'5	47'5	47'7
11	43'0	42'5	41'7	41'8	42'4	42'4	43'2	43'7	43'2	43'5	42'8	42'9
12	41'6	41'6	41'4	42'2	43'2	43'0	43'8	45'3	45'8	46'0	46'0	46'0
13	41'7	41'6	41'0	41'0	41'2	42'2	42'8	42'9	42'6	42'6	42'6	42'3
14	—	—	—	—	—	—	—	—	—	—	—	—
15	42'4	42'5	42'2	41'4	41'7	42'6	42'9	43'2	43'0	43'0	43'4	44'0
16	37'5	37'2	36'5	35'7	35'9	36'3	36'2	36'4	37'2	38'4	39'0	39'2
17	40'2	40'3	40'4	41'0	41'5	42'5	43'2	43'0	44'5	44'5	45'7	45'8
18	41'2	41'4	41'4	41'5	42'2	43'0	43'8	44'4	44'7	45'5	46'3	46'6
19	45'7	45'6	45'2	44'8	44'9	45'3	45'7	46'2	46'7	47'5	47'4	47'4
20	46'0	45'6	45'3	44'9	45'4	45'3	44'8	44'2	44'0	44'2	44'3	44'0
21	—	—	—	—	—	—	—	—	—	—	—	—
22	36'8	36'5	36'2	36'4	37'0	38'8	39'4	40'4	40'6	41'0	40'9	40'3
23	35'2	34'4	34'5	35'6	36'5	37'1	37'6	38'0	38'4	38'6	39'1	39'8
24	32'4	32'7	33'0	34'0	35'3	36'7	38'0	39'2	39'8	40'6	40'9	41'0
25	39'8	39'3	39'0	39'8	41'0	42'0	43'0	43'4	44'0	45'1	45'7	46'0
26	37'8	37'4	37'2	37'4	40'8	42'1	43'0	43'5	43'8	44'3	43'9	43'4
27	42'0	42'0	42'0	42'2	42'9	44'4	44'4	44'8	45'4	45'2	45'4	45'0
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	40'78	40'68	40'49	40'71	41'38	42'06	42'60	43'11	43'43	43'87	44'09	44'08

* Five minutes late.

b Two minutes late.

c Three minutes late.

re, 1° 63.

		HORIZONTAL FORCE.												Daily and Monthly Means.	
		One Scale Division = '000087 parts of the H.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.													
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
634'6	633'4	634'7	635'3	635'1	634'3	634'3	633'1	632'5	634'3	635'3	632'6	632'6	631'5	634'25	
629'5	629'3	628'6	629'3	628'2	628'3	627'3	627'5	628'3	634'3	629'3	628'5	628'5	628'3	627'85	
624'0	629'0	631'5	631'0	630'0	631'0	632'6	635'0	633'0	636'0	635'5	628'7	635'2	627'0	626'95	
650'0	648'2	648'0	648'0	646'3	646'0	645'2	638'8	643'2	645'1	646'3	647'0	647'2	647'4	642'22	
650'3	650'0	649'8	647'8	648'0	646'4	646'2	640'1	642'0	643'2	642'4	637'9	639'0	642'0	644'75	
633'8	623'6	628'4	630'0	624'1	610'0	623'1	624'0	—	637'5	632'5	637'2	—	—	629'51	
623'1	627'8	631'5	631'0	627'8	627'0	633'1	614'5	623'0	622'4	623'5	621'8	626'7	627'0	626'40	
621'0	622'0	623'5	631'0	622'0	627'2	628'8	630'3	628'7	628'5	629'2	630'0	631'5	631'3	625'10	
629'0	632'4	630'3	630'0	630'0	632'0	633'0	630'2	630'0	628'8	631'1	631'3	633'8	626'0	628'46	
633'8	638'0	632'2	634'6	637'0	639'2	639'6	639'8	638'0	637'0	637'2	635'9	636'8	639'2	633'50	
630'2	631'4	633'1	633'0	635'8	632'0	633'2	638'5	638'0	638'0	639'0	640'0	641'2	640'3	634'56	
638'8	639'0	640'0	641'4	642'4	644'0	644'0	644'0	—	645'2	644'0	645'0	645'8	651'6	641'77	
636'2	639'5	637'0	641'0	641'5	637'0	635'2	634'0	633'8	633'0	639'8	640'5	635'2	644'8	639'93	
647'6	636'0	637'8	639'6	640'0	637'8	635'8	635'0	636'0	636'0	638'5	639'0	641'5	640'2	642'80	
640'0	637'6	638'5	637'0	637'0	637'0	636'0	631'0	637'5	634'0	636'0	634'5	636'0	635'0	637'23	
635'0	634'5	637'5	636'0	634'8	631'5	635'0	634'1	634'2	635'0	631'2	633'0	633'2	632'8	636'95	
637'5	638'5	639'0	634'0	636'8	640'0	641'3	641'0	639'2	—	—	—	—	—	632'31	
639'0	634'0	631'2	618'2	615'0	579'8	618'5	625'4	606'4	619'1	620'0	627'0	628'0	633'4	637'36	
639'0	642'0	610'8	639'0	635'4	632'1	639'0	637'9	638'8	613'0	614'4	646'0	639'2	610'0	625'74	
631'5	643'0	635'1	609'0	635'9	628'0	612'4	640'0	625'4	631'0	607'5	623'0	631'0	634'7	635'30	
642'8	630'2	621'8	620'2	618'8	629'0	617'0	611'0	614'0	616'0	619'6	612'2	608'0	629'2	630'90	
636'0	624'5	630'0	626'4	627'0	646'6	632'8	634'8	634'5	634'2	632'1	631'4	635'8	634'6	622'25	
633'0	631'2	634'0	634'2	644'0	634'4	634'5	633'8	—	642'8	644'2	642'0	643'9	651'1	629'68	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	632'39	
635'72	634'67	634'60	633'32	633'95	632'38	634'53	633'14	634'18	635'30	635'16	635'00	636'35	637'57	633'26	
TEMPERATURE OF THE BILAR MAGNET.															
°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	
43'1	43'3	43'5	43'6	43'6	43'5	43'3	43'0	43'0	43'4	44'0	44'3	44'4	44'8	41'92	
48'9	49'0	49'3	49'3	48'9	48'6	48'6	49'0	49'9	49'7	49'8	49'8	50'0	49'8	48'07	
47'0	45'8	45'0	44'6	42'4	41'2	40'8	40'2	39'6	38'8	37'8	37'6	37'1	36'8	44'39	
39'5	39'5	40'2	39'6	39'2	39'2	39'0	38'7	38'4	37'8	37'3	37'1	36'8	36'0	37'48	
41'7	41'6	41'8	41'8	42'0	41'6	41'6	41'5	41'0	40'4	40'0	39'8	39'5	38'7	39'38	
43'5	44'4	45'0	44'0	43'2	42'0	41'2	40'8	—	—	—	—	—	—	41'48	
46'0	45'9	46'1	46'1	46'4	46'0	46'0	46'2	46'2	46'4	46'4	46'4	46'4	46'4	45'47	
47'6	47'0	47'6	47'6	47'6	47'6	47'6	47'2	47'0	47'0	46'6	46'0	45'5	45'5	46'96	
47'5	47'7	48'0	47'6	47'5	47'3	46'8	46'0	45'3	45'0	44'8	44'2	43'8	43'5	46'10	
42'8	42'9	43'0	42'0	42'2	43'0	42'8	42'5	42'2	41'7	41'4	41'9	41'9	41'5	42'47	
46'0	46'0	45'4	44'2	43'5	43'0	42'7	41'4	41'1	41'0	41'0	41'4	41'8	41'8	43'09	
42'6	42'3	42'4	42'2	41'3	41'4	41'6	42'0	—	—	—	—	—	—	41'79	
43'4	44'0	43'5	43'1	43'0	42'7	42'2	41'7	41'3	40'7	41'2	42'0	42'6	42'8	41'97	
39'0	39'2	40'2	41'0	40'5	40'1	39'8	39'8	40'0	40'7	40'5	40'3	40'1	39'9	38'68	
45'7	45'8	45'8	46'0	46'0	46'0	44'3	43'5	43'1	42'8	41'9	41'0	41'4	41'0	43'14	
46'3	46'6	46'4	45'9	45'6	45'3	45'1	44'8	44'5	45'0	45'0	45'0	45'4	45'6	44'30	
47'4	47'4	47'8	47'4	47'4	47'6	47'0	46'9	46'7	46'7	46'6	46'5	46'5	46'2	46'39	
44'3	44'0	44'2	43'6	43'8	44'2	44'0	43'2	—	—	—	—	—	—	42'46	
40'9	40'3	40'8	41'2	41'3	41'4	41'2	40'8	40'6	39'4	38'5	37'8	37'3	36'0	39'19	
39'1	39'8	40'0	40'0	39'4	37'9	36'5	36'0	35'5	34'6	34'0	33'6	33'2	32'4	36'58	
40'9	41'0	41'4	40'8	39'0	39'4	39'4	39'5	39'4	38'9	38'5	39'0	39'1	39'7	38'24	
45'7	46'0	45'8	45'8	45'3	45'0	44'0	44'0	43'2	42'0	41'2	40'2	39'5	38'4	42'60	
43'9	43'4	43'5	43'9	43'6	43'4	43'3	43'5	43'5	43'4	43'6	43'3	42'8	41'6	42'25	
45'4	45'0	45'2	44'8	44'8	44'0	44'2	44'2	—	—	—	—	—	—	42'28	
—	—	—	—	—	—	—	—	36'6	36'7	36'9	37'1	37'1	37'4	—	
44'09	44'08	44'25	43'96	43'65	43'39	43'04	42'77	41'82	41'63	41'44	41'33	41'28	41'00	42'37	

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.													
Mean (Göttingen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
MARCH.	1	Sc. Div. 657.6	Sc. Div. 652.4	Sc. Div. 640.2	Sc. Div. 613.2	Sc. Div. 622.3	Sc. Div. 627.0	Sc. Div. 613.2	Sc. Div. 616.6	Sc. Div. 608.0	Sc. Div. 635.4	Sc. Div. 626.6	Sc. Div. 624.2
	2	629.2	628.2	624.7	624.2	618.2	618.2	619.4	620.2	622.7	625.2	626.4	623.2
	3	634.2	633.2	630.4	626.6	621.6	614.2	610.2	610.6	619.8	623.3	631.2	630.8
	4	635.2	636.6	631.4	624.0	613.0	606.2	609.3	615.2	620.7	623.2	626.2	621.2
	5	631.5	629.3	626.2	620.2	618.3	614.7	612.6	612.2	614.2	623.9	629.4	624.2
	6	635.2	638.2	634.2	629.2	624.0	613.2	612.7	614.8	625.5	627.7	632.0	635.8
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	635.0	636.0	632.5	625.2	613.8	612.4	612.0	617.8	630.8	616.2	628.6	631.0
	9	635.2	616.5	632.0	616.5	622.5	614.4	613.8	614.0	629.8	631.7	635.8	640.0
	10	627.6	635.0	631.4	633.9	623.2	619.1	619.0	612.5	621.0	632.0	629.0	626.8
	11	632.2	631.3	629.0	629.0	627.0	626.2	628.6	629.5	632.0	632.0	637.0	637.8
	12	645.2	647.0	641.0	639.8	636.0	632.0	634.6	632.4	635.0	638.2	644.0	644.8
	13	647.0	645.0	639.0	643.0	641.7	638.3	636.0	637.8	639.2	651.4	651.2	656.5
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	650.0	645.2	637.4	632.2	619.7	620.5	621.6	624.4	624.1	638.8	638.5	640.0
	16	646.0	641.2	636.2	628.0	621.0	617.1	625.0	637.0	643.0	648.0	642.7	641.0
	17	649.1	648.1	644.2	635.0	627.7	623.8	622.5	624.0	636.0	642.5	648.0	646.7
	18	642.0	640.0	637.0	624.0	613.2	610.0	615.0	620.0	628.6	628.0	632.2	635.8
	19	628.0	585.0	558.0	541.1	554.0	575.0	586.5	586.5	600.1	637.7	634.0	614.8
	20	607.6	607.0	610.0	610.0	604.5	609.8	608.8	609.8	609.2	609.0	606.8	606.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	631.2	633.0	631.0	626.5	618.6	613.2	615.3	615.0	620.0	623.0	628.0	629.0
	23	636.8	631.4	626.0	623.0	614.0	614.0	612.0	614.0	618.0	624.5	630.0	634.8
	24	620.0	622.0	612.7	605.5	609.0	602.5	600.5	609.8	611.2	618.2	628.7	630.2
	25	621.3	616.0	616.5	612.6	606.0	596.0	603.2	607.5	610.0	615.2	614.2	620.4
	26	617.0	611.2	612.0	611.6	601.5	601.0	602.8	611.8	611.0	621.0	617.0	620.0
	27	628.8	631.0	630.2	623.5	621.0	623.1	626.2	628.2	633.2	634.0	633.2	634.7
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	641.0	639.2	634.0	625.6	617.7	614.0	614.0	616.0	619.8	624.0	631.0	630.4
	30	637.0	634.5	627.2	622.2	612.5	614.5	612.2	616.2	625.0	630.2	633.8	636.8
	31	638.0	641.0	635.0	626.8	617.3	617.2	618.0	622.2	625.8	631.8	637.8	639.8
Hourly Means		635.03	633.40	630.05	624.28	618.67	615.87	616.10	618.83	623.60	628.90	631.51	632.40
TEMPERATURE OF THE BIFILAR MAGNET.													
MARCH.	1	37.0	37.0	37.0	37.6	38.6	39.7	40.2	40.7	41.2	41.0	41.1	41.2
	2	40.5	40.4	40.6	42.7	43.5	43.5	41.5	45.3	46.0	46.5	47.2	47.6
	3	44.7	44.5	44.0	44.2	44.6	45.2	46.1	46.8	47.2	48.2	48.8	48.9
	4	44.8	44.4	45.0	46.2	47.1	48.0	48.3	48.8	48.9	49.9	50.4	50.4
	5	43.5	42.2	41.5	42.4	44.5	46.1	47.0	47.3	48.4	49.0	49.6	49.7
	6	45.4	44.6	45.2	46.4	47.4	48.5	49.0	49.5	49.5	50.0	49.8	49.4
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	44.1	43.5	44.8	45.6	45.8	46.6	46.8	47.4	47.4	47.4	47.9	47.9
	9	42.2	41.3	40.7	40.4	40.4	40.4	40.6	41.0	40.9	41.1	41.2	41.0
	10	40.6	40.5	41.0	42.2	42.8	44.4	44.9	45.5	45.6	46.0	46.0	45.7
	11	41.1	40.6	40.3	40.7	40.6	40.8	42.0	42.4	43.0	43.5	44.5	44.2
	12	35.7	35.4	36.4	38.0	39.2	40.0	41.1	41.5	41.7	43.0	43.0	43.6
	13	37.5	37.5	37.7	38.5	39.6	41.3	41.8	42.4	43.2	44.2	44.8	45.2
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	38.7	38.7	39.0	39.2	39.9	41.3	42.2	42.6	42.4	42.5	42.5	42.4
	16	37.4	36.4	37.0	37.0	37.5	38.0	38.8	39.6	40.4	41.4	41.7	41.9
	17	36.5	36.2	36.8	38.0	39.4	41.2	41.8	42.7	42.9	43.9	44.7	44.7
	18	44.2	44.0	44.2	44.9	46.0	47.1	48.4	49.0	49.7	51.2	52.0	52.4
	19	44.9	44.9	46.4	47.0	48.8	48.7	49.7	49.9	50.0	50.6	50.8	51.7
	20	49.0	48.3	48.0	48.0	48.4	48.8	49.5	50.1	50.2	50.4	50.4	50.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	41.8	42.0	42.4	43.0	43.0	43.1	43.8	44.0	44.0	44.4	44.9	44.5
	23	46.8	46.6	46.6	46.7	47.0	47.7	48.4	49.1	49.4	50.5	50.8	51.3
	24	47.2	47.2	48.4	49.0	49.8	49.9	49.9	50.0	50.5	51.3	51.8	52.6
	25	50.0	48.7	50.5	51.4	52.0	52.4	52.4	52.1	52.2	52.6	52.6	52.2
	26	49.5	48.6	48.0	48.4	48.7	49.4	49.8	50.3	50.6	51.0	51.0	50.4
	27	40.6	40.0	40.0	40.4	40.9	41.4	41.2	41.0	41.4	42.4	42.6	43.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	43.5	43.7	44.8	46.4	48.0	49.0	49.8	50.0	50.0	50.0	50.3	50.0
	30	44.4	44.0	44.8	45.0	45.2	46.0	46.0	46.0	46.0	46.2	44.8	44.6
	31	42.0	43.3	44.9	45.5	45.9	46.2	46.3	46.8	46.8	46.8	46.8	46.6
Hourly Means		42.64	42.29	42.68	43.38	44.07	44.85	45.41	45.84	46.13	46.71	46.97	47.00

* Six minutes late.

* Twelve minutes late.

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

1.63.		One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.												
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
627'6	624'2	635'4	633'0	620'2	632'1	624'1	622'2	623'8	624'2	624'2	625'6	625'2	628'2	627'29
623'2	628'3	627'6	628'3	628'9	630'2	630'4	629'2	629'3	632'2	632'2	632'2	633'7	633'2	626'97
61'2	630'8	630'2	632'0	632'2	631'2	629'2	630'4	631'2	632'4	632'6	633'2	633'4	634'2	627'85
62'6	621'2	612'7	619'2	614'4	619'6	611'4	616'0	613'5	621'6	619'7	623'0	624'0	625'3	620'11
624'2	621'2	626'4	612'8	620'2	622'0	630'2	631'7	631'4	631'6	633'2	634'4	634'2	634'0	624'95
635'8	635'8	635'8	633'8	630'6	612'0	633'7	623'0	—	—	—	—	—	—	626'30
638'6	631'0	615'6	618'9	609'8	635'0	623'8	626'7	634'2	626'0	628'5	621'2	619'0	632'6	624'23
635'8	640'0	638'5	640'0	640'0	638'0	641'0	643'0	643'5	639'6	639'4	640'0	638'8	640'0	632'67
626'8	630'0	630'0	631'8	633'0	634'2	634'0	635'0	635'8	635'0	635'4	635'5	635'0	633'1	629'93
637'8	633'0	633'0	637'2	638'0	638'0	640'4	639'8	641'2	642'0	641'7	644'8	646'0	646'4	635'84
644'0	644'8	645'0	644'8	638'0	638'0	634'1 ^b	638'2	641'4	640'1	639'0	639'0	640'8	644'0	639'68
656'5	632'8	632'8	638'1	641'9	634'0	638'8	638'0	—	—	—	—	—	—	642'55
638'5	640'0	640'0	640'9	644'0	643'0	641'5	644'0	643'8	642'8	643'2	643'8	645'2	644'4	637'89
624'2	641'0	643'0	643'0	644'0	646'2	646'0	646'2	646'6	646'5	646'4	648'2	650'2	649'0	640'81
646'7	646'0	645'8	644'2	641'2	641'2	644'2	643'4	643'2	642'9	641'1	642'8	637'8	639'0	639'97
632'2	633'8	630'8	630'8	624'8	611'5	621'0	621'4	610'0	607'9	609'8	619'0	607'0	617'0	622'49
644'0	614'8	582'5	606'1	604'0	584'2	508'0	443'5	576'7	604'0	617'0	597'0	604'0	610'8	584'94
636'8	606'5	589'0	589'4	610'0	607'5	602'0	567'5	—	—	—	—	—	—	609'33
628'0	629'0	631'6	632'2	631'0	630'3	630'2	631'8	629'2	626'8	627'2	630'1	630'0	631'8	626'92
630'0	634'8	620'3	612'6	600'0	604'4	604'8	604'5	599'8	602'0	612'0	609'0	618'0	615'4	615'89
628'7	630'2	617'5	622'8	615'8	617'8	619'1	621'9	607'0	607'5	619'0	622'0	621'6	624'2	616'10
644'2	641'2	621'0	619'0	619'6	618'0	619'8	619'0	614'4	613'0 ^d	614'0	614'5	614'0	611'0	614'01
637'0	620'0	620'0	620'8	622'0	624'8	625'0	624'5	624'3	624'2	627'3	624'4	624'0	632'5	617'99
643'7	634'7	639'0	636'5	635'8	633'4	638'0	632'2	—	—	—	—	—	—	632'46
631'0	630'4	631'8	633'0	632'6	632'2	622'8	630'4	633'0	633'1	633'7	630'0	632'0	635'0	628'60
633'8	636'8	628'4	632'5	636'0	636'8	637'1	635'0	636'9	637'0	636'4	640'3	638'0	638'7	630'63
637'8	639'8	635'2	636'2	636'3	635'4	632'1	633'4	636'5	638'5	640'0	639'2	642'8	642'0	633'39
631'51	632'40	629'15	629'44	628'50	628'72	629'03	628'02	629'95	629'56	630'73	631'61	631'81	633'84	627'88

TEMPERATURE OF THE BUILAR MAGNET														
41'1	41'2	41'3	41'5	41'8	42'0	41'8	41'3	41'0	40'7	40'9	40'8	41'0	40'6	40'29
47'2	47'6	46'3	45'7	45'4	45'0	44'7	45'0	45'0	44'7	44'9	45'2	45'2	44'8	44'59
48'8	48'9	48'8	48'6	48'5	48'1	48'0	48'0	47'5	46'6	46'4	46'0	45'3	44'7	46'65
50'4	50'4	50'2	49'6	49'2	48'5	48'0	47'2	46'8	46'0	45'2	44'5	43'8	43'1	47'26
49'6	49'7	49'3	48'6	48'2	48'0	47'5	47'4	47'2	46'6	46'1	46'1	46'0	45'6	46'57
49'8	49'4	49'2	48'6	48'4	47'1	46'6	46'3	—	—	—	—	—	—	—
47'9	47'9	47'6	46'5	45'6	45'0	44'4	43'8	43'5	42'9	43'0	43'0	42'9	42'6	45'25
41'2	41'0	40'7	40'4	40'0	40'0	40'0	40'6	41'0	41'0	40'8	40'7	40'7	40'8	40'75
46'0	46'0	45'7	45'0	44'6	44'2	43'7	43'0	42'0	42'0	41'6	41'5	41'6	41'6	43'42
44'5	44'2	43'6	43'0	42'6	42'0	41'2	40'6	40'2	39'3	38'4	37'8	37'1	36'5	41'08
43'0	43'6	43'5	43'6	43'0	41'5	40'6	39'6	38'6	37'6	37'3	37'0	37'0	37'4	39'80
44'8	45'2	44'7	42'4	42'6	41'9	41'5	41'2	—	—	—	—	—	—	—
42'5	42'1	42'3	41'4	41'4	41'0	40'5	40'0	39'8	39'7	39'5	38'8	38'0	37'6	40'47
41'7	41'9	41'5	40'6	40'2	40'2	39'8	39'0	38'8	38'4	37'8	37'9	38'0	37'2	39'02
41'7	41'7	41'8	44'3	44'2	44'0	43'9	44'0	44'2	44'5	44'5	44'8	44'6	44'4	42'54
52'0	52'4	52'3	51'4	50'3	49'1	48'8	48'5	47'9	47'2	46'4	46'0	45'9	45'1	48'00
50'8	51'7	51'5	51'2	50'4	49'7	49'0	48'5	48'4	48'5	48'5	48'6	49'0	49'0	48'99
50'4	50'0	50'0	50'0	50'1	50'1	50'0	49'5	—	—	—	—	—	—	—
41'9	44'5	44'9	45'4	45'4	45'6	45'6	45'7	45'7	45'4	45'4	45'8	46'2	46'5	44'52
50'8	51'3	51'5	51'0	50'6	50'2	50'0	50'0	49'7	49'3	48'9	48'3	47'9	47'4	48'99
51'8	52'6	52'8	52'2	51'5	51'0	50'4	50'1	50'0	49'8	49'6	49'3	49'4	50'0	50'15
52'6	52'5	52'2	51'6	51'6	51'4	51'2	51'2	51'4	51'1	51'1	50'5	50'3	49'8	51'37
51'0	50'4	49'9	48'5	48'0	46'6	46'0	45'4	44'9	44'3	43'7	42'8	42'2	41'5	47'48
42'6	43'0	42'9	42'5	42'5	41'6	41'4	41'2	—	—	—	—	—	—	—
50'3	50'0	50'0	48'8	48'3	48'2	47'6	47'2	47'3	46'6	46'4	45'7	45'1	44'8	47'56
44'8	44'6	45'2	44'5	44'0	43'7	43'6	43'5	43'4	43'2	42'4	41'8	41'7	41'3	44'29
46'8	46'6	46'3	45'0	44'5	43'9	43'6	43'2	43'0	42'6	42'0	41'6	41'5	41'2	44'43
46'97	47'00	46'79	46'21	45'88	45'29	45'02	44'71	44'15	43'80	43'54	43'30	43'12	42'83	44'70

* Five minutes late.

* Ten minutes late.

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
APRIL.	1	642'2	636'7	636'2	634'5	627'3	622'8	622'4	626'2	631'0	636'8	641'4
	2	—	—	—	—	—	—	—	—	—	—	—
	3	640'0	631'0	608'0	617'0	612'5	597'0	582'2	593'0	613'0 ^b	613'2	639'0
	4	—	—	—	—	—	—	—	—	—	—	—
	5	629'0	622'5	613'5	610'2	601'0	600'8	600'8	606'4	606'0	620'8	624'2
	6	622'0	615'8	610'6	602'2	593'2	595'5	603'8	608'0	617'0	625'3	625'0
	7	621'2	626'0	619'4	609'9	599'5	596'1	599'1	620'8	635'0	602'0	633'0
	8	619'2	601'0	601'0	598'2	592'4	591'0 ^c	594'5 ^d	599'2	614'5	613'5	610'0
	9	609'0	608'0	605'0	600'0	591'0	590'0	600'5	604'2	612'2	617'0	614'0
	10	617'0	617'5	612'0	606'8	600'0	602'0	604'0	610'8	614'2	618'8	618'2
	11	—	—	—	—	—	—	—	—	—	—	—
	12	633'6	630'2	624'6	616'0	610'0	610'0	616'8	633'4	638'8	649'0	639'1
	13	628'0	628'4	620'4	610'2	601'0	600'6	610'1	620'8	632'7	645'4	639'0
	14	617'7	614'8	611'8	604'0	590'8	592'5	598'0	608'5	610'0	621'5	624'2
	15	614'0	612'0	603'0	589'0	583'2	584'0	592'2	607'2	620'0	628'0	632'2
	16	626'0	625'0	617'0	604'2	593'0	593'2 ^e	606'0	607'2	612'5	626'0	628'8
	17	608'4	619'7	613'0	603'8	594'1	594'2	598'5	604'0	608'6	621'1	626'2
	18	—	—	—	—	—	—	—	—	—	—	—
	19	640'0	637'2	630'0	622'0	621'6	625'4	629'0	633'0	646'0	642'8	645'0
	20	572'2	504'5	490'5	545'1	561'0	581'0	599'0	616'0	635'0	640'0	615'8
	21	592'4	530'0	575'0	572'0	569'5	573'6	595'0	609'0	605'2	597'0	607'4
	22	600'7	598'0	584'0	585'6	582'8	575'5	586'2	587'0	602'0	601'0	596'0
	23	609'0	605'2	602'4	600'0	596'2	599'8	607'5	614'2	614'1	620'5	616'8
	24	625'5	621'0	614'0	608'0	605'0	613'8	622'8	626'9	628'0	625'0	621'0
	25	—	—	—	—	—	—	—	—	—	—	—
	26	627'0	623'8	617'8	616'0	611'0	614'8	620'0	623'5	628'0	632'0	626'9
	27	621'8	617'7	613'0	602'0	603'0	601'0	605'0	621'0	622'6	617'0	620'0
	28	624'5	621'0	616'2	619'0	615'0	620'0	619'0	630'2	637'4	631'0	628'2
	29	626'4	621'0	615'0	610'0	610'5	617'4	626'2	625'1	632'0	648'2	635'9
	30	598'2	595'0	607'8	612'0	614'0	600'2	593'0	609'1	612'9	618'2	648'0
Hourly Means		621'10	617'40	611'73	607'08	601'29	601'34	605'21	612'66	619'40	625'49	627'65
TEMPERATURE OF THE BIFILAR MAGNET.												
APRIL.	1	41'0	40'5	41'0	42'2	43'5	44'5	45'0	45'6	45'5	46'0	46'1
	2	—	—	—	—	—	—	—	—	—	—	—
	3	44'4	44'8	45'2	46'6	47'8	49'0	50'0	50'6	51'0	51'8	52'4
	4	—	—	—	—	—	—	—	—	—	—	—
	5	45'5	46'9	48'3	50'0	51'4	51'8	52'3	52'6	52'6	52'6	52'5
	6	49'4	49'2	49'5	49'8	50'4	51'8	52'4	52'4	52'5	53'4	53'7
	7	51'8	51'6	51'9	51'9	52'1	52'8	53'1	53'8	54'5	55'7	56'4
	8	51'0	53'7	54'0	54'3	54'8	55'5	56'4	57'5	58'5	59'4	60'0
	9	52'0	52'3	52'8	53'1	53'7	53'9	54'3	54'0	54'1	54'8	55'3
	10	51'9	52'5	53'7	54'2	54'2	54'2	54'4	54'6	54'8	54'6	54'6
	11	—	—	—	—	—	—	—	—	—	—	—
	12	48'2	48'3	48'8	49'5	50'3	50'3	50'9	51'4	51'8	52'5	53'7
	13	49'5	50'1	51'2	51'5	51'6	51'9	51'9	51'9	51'9	52'4	53'0
	14	51'0	51'4	52'3	52'8	53'2	53'2	53'0	53'0	53'4	54'0	54'7
	15	49'5	49'8	49'9	50'0	49'9	49'9	49'9	50'5	51'0	51'6	52'0
	16	45'7	46'4	47'1	48'2	48'6	48'8	48'7	49'2	48'7	48'3	48'7
	17	48'6	48'6	48'6	48'6	48'5	48'9	49'4	49'4	49'0	48'5	47'8
	18	—	—	—	—	—	—	—	—	—	—	—
	19	41'6	41'9	42'2	42'5	43'1	43'5	44'3	45'2	46'0	46'7	47'2
	20	48'9	49'1	49'3	49'0	49'6	50'0	50'8	51'4	51'6	51'9	52'4
	21	52'4	52'4	53'0	53'2	53'3	53'5	54'5	55'6	55'5	57'0	59'4
	22	61'5	61'5	61'0	60'8	60'5	60'4	60'2	60'0	59'5	59'5	59'0
	23	53'5	53'0	52'6	52'4	53'0	53'6	54'0	54'0	54'4	55'3	55'7
	24	49'6	50'2	50'9	51'5	52'4	53'5	53'9	54'0	54'2	54'7	55'3
	25	—	—	—	—	—	—	—	—	—	—	—
	26	52'3	52'4	52'5	52'8	53'8	54'5	55'5	56'5	57'4	58'3	59'0
	27	51'8	55'0	55'0	56'0	55'8	55'2	55'0	54'7	54'7	55'0	55'3
	28	49'0	50'4	51'0	51'5	52'0	52'3	52'3	52'5	52'6	52'8	52'5
	29	49'8	49'5	49'3	49'0	49'4	49'8	50'2	50'2	50'7	51'8	51'9
	30	49'8	49'8	49'8	50'6	50'9	51'3	51'4	51'8	52'4	53'0	53'2
Hourly Means		50'05	50'30	50'69	51'22	51'70	52'12	52'40	52'69	52'89	53'35	53'66

* Good Friday.

* Four minutes late.

* Seven minutes late.

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
611'4	636'0	639'0	641'0	639'0	633'5	631'0	632'2	640'9	637'8	636'6	640'6	637'0	610'0	633'84
659'0	631'4	641'1	598'8	597'0	629'0	607'2	584'6	619'0	627'0	617'4	617'0	622'5	629'0	616'12
630'8	624'2	619'6	618'8	625'5	619'4	617'0	628'8	627'4	622'0	619'0	623'0	623'2	622'0	617'99
625'0	620'0	625'0	625'4	611'0	618'2	620'0	613'0	617'0	623'3	616'6	622'0	620'0	613'8	614'95
620'0	633'0	625'0	614'2	606'0	570'0	530'4	463'5	493'8	407'8	240'0	435'9	489'0	610'0	561'15
610'0	611'2	593'7	596'3	597'0	582'5	596'2	591'2	593'0	597'1	601'6	603'0	609'0	610'8	600'71
614'0	609'8	611'2	607'8	608'0	613'0	613'1	612'8	613'4	615'0	614'4	614'0	618'4	618'0	609'16
618'2	616'8	616'4	616'0	617'2	615'0	617'0	616'4	627'0	629'2	629'2	632'0	634'0	634'7	617'59
639'1	606'0	619'6	619'8	620'1	622'0	625'0	623'0	627'0	625'2	628'0	628'0	628'2	630'8	625'18
639'0	620'0	623'5	625'0	615'0	609'0	615'0	620'0	622'2	617'0	620'8	619'0	618'2	623'1	620'18
624'2	628'0	617'0	605'0	600'0	601'6	606'0	606'4	610'0	613'9	611'9	616'0	616'2	617'4	610'13
632'2	623'9	617'8	615'8	621'2	615'0	618'0	620'6	624'7	620'0	621'0	618'8	619'0	626'2	613'67
628'8	632'0	629'2	634'1	610'2	594'0	607'2	611'0	626'0	623'5	611'2	624'0	626'2	623'4	616'16
626'2	629'0	628'8	625'9	623'4	626'0	627'0	626'0	639'2	639'3	639'8	640'2	640'7	639'2	621'63
645'0	647'0	645'0	645'0	645'0	639'2	643'4	619'0	641'2	625'9	519'4	477'1	536'6	517'3	618'05
632'0	615'8	645'0	606'0	610'0	612'8	610'0	614'8	615'5	612'0	598'0	611'2	620'8	624'0	597'59
607'4	640'5	619'5	596'8	599'0	590'9	601'1	604'2	598'0	600'5	597'1	599'0	599'0	601'2	594'70
596'0	603'8	603'0	602'1	602'0	604'8	604'0	604'8	606'0	604'0	603'5	605'2	608'0	609'2	598'42
616'8	611'0	617'0	612'8	611'5	613'0	613'0	613'0	615'0	614'2	615'2	617'6	618'2	622'4	611'86
621'0	617'5	616'0	616'0	617'5	618'0	617'4	617'0	622'0	623'8	625'0	623'4	623'2	626'1	619'75
626'9	627'0	618'8	605'2	609'8	618'2	616'4	615'6	616'0	617'4	619'0	619'4	620'2	619'8	619'32
620'0	621'8	620'0	617'8	617'8	618'6	620'0	622'1	621'1	622'0	621'8	624'0	622'0	626'5	617'61
628'2	629'5	621'1	618'0	616'2	619'0	622'0	626'0	628'1	625'0	613'0	615'0	605'0	627'0	622'47
635'9	637'0	619'0	618'0	605'0	618'0	614'0	620'0	617'0	613'0	580'3	610'0	612'2	595'8	617'79
648'0	641'0	626'5	631'0	608'5	608'8	615'2	611'2	612'0	618'1	618'2	618'8	620'0	615'0	614'70
627'65	622'85	619'92	616'70	613'00	613'98	615'41	615'03	620'19	620'37	617'26	620'52	621'02	620'96	616'15

TEMPERATURE OF THE BIFILAR MAGNET.

46'1	45'8	45'4	44'6	44'3	44'4	45'0	45'6	44'9	45'0	44'9	44'6	44'8	44'4	44'36
52'4	52'6	52'9	52'4	52'4	51'8	51'3	50'6	46'7	46'1	46'1	46'0	46'0	46'6	48'96
52'5	52'3	52'0	51'0	50'8	50'2	50'0	49'5	49'4	49'4	49'2	49'2	49'2	49'2	50'33
53'4	53'7	53'6	53'4	53'2	53'2	53'0	52'8	52'5	52'3	52'3	52'2	52'2	52'2	52'07
56'4	57'4	58'3	57'6	57'5	57'0	56'0	55'7	55'2	54'7	54'0	54'2	54'0	53'9	54'63
60'0	61'5	59'6	58'2	57'4	57'0	56'6	55'7	55'2	54'4	54'0	53'4	52'9	52'5	56'06
55'3	55'4	55'1	54'2	53'8	53'4	52'9	52'4	52'1	52'0	51'8	51'7	51'6	51'6	53'29
54'6	54'1	53'8	53'1	52'4	51'9	51'5	51'2	46'5	46'5	46'6	47'4	48'0	48'4	51'88
53'7	53'5	53'7	52'6	52'3	52'0	51'8	51'5	51'1	51'0	51'0	50'8	50'4	49'6	51'13
53'0	53'0	53'4	53'0	52'9	52'9	52'8	52'6	52'2	52'0	51'5	50'9	50'4	50'0	51'98
54'9	54'7	54'0	53'5	53'3	52'9	52'6	52'2	48'0	47'2	46'8	46'5	46'2	46'0	49'34
52'0	52'0	51'3	50'4	49'7	49'1	48'7	48'2	48'0	48'2	48'2	48'4	48'5	48'7	48'16
48'3	48'7	48'0	48'5	48'1	47'8	47'8	47'8	48'2	48'2	48'2	48'4	48'5	48'7	48'16
48'5	47'8	48'0	47'1	46'6	46'2	43'5	43'0	40'4	41'0	41'4	41'4	41'6	41'4	46'10
47'2	48'5	49'4	49'4	49'4	49'5	49'5	49'4	49'4	49'0	49'0	49'2	49'4	49'1	46'85
52'4	52'2	52'2	52'0	52'4	52'5	52'8	53'0	53'4	53'0	53'0	52'8	52'6	52'3	51'59
59'4	59'0	60'6	61'4	62'1	62'5	62'5	62'0	62'0	61'9	61'5	61'5	61'5	61'6	58'37
59'5	59'9	59'0	58'5	58'2	57'8	57'2	56'6	55'5	55'0	54'5	54'5	54'5	54'2	58'35
55'7	55'5	55'5	54'6	54'3	54'0	53'4	53'0	52'6	52'0	51'7	51'3	51'3	50'0	53'36
55'3	55'7	55'6	55'1	55'0	54'5	54'2	54'0	51'2	51'2	51'3	51'4	51'7	52'0	53'05
58	59'0	59'0	58'7	58'7	58'2	57'5	57'0	57'2	56'8	56'6	56'2	55'5	55'2	56'27
57'0	55'3	55'0	54'0	53'0	52'5	51'6	51'1	50'6	50'3	49'8	49'4	49'2	48'5	53'19
52'5	52'3	51'9	51'1	50'4	49'7	49'5	49'7	49'6	49'5	49'5	49'5	49'5	49'8	50'87
51'9	51'7	51'7	51'4	51'3	51'5	51'5	51'1	51'1	51'0	50'8	50'8	50'4	50'0	50'66
53'4	53'2	52'5	51'6	51'3	51'3	50'8	50'2	50'2	49'6	49'2	49'0	49'1	48'5	50'86
53'66	53'61	53'42	52'71	52'35	52'01	51'58	51'23	50'39	50'13	49'96	49'79	49'70	49'51	51'56

* Five minutes late.

* Eight minutes late.

* Ten minutes late.

HORIZONTAL FORCE.												
One Scale Division = $\frac{1}{1000000}$ parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MAY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	623'1	621'9	625'0	622'0	603'9	598'0	609'0	613'2	625'0	636'0	632'0	627'4
2	—	—	—	—	—	—	—	—	—	—	—	—
3	624'0	624'5	621'2	616'0	614'0	611'0	615'9	622'0	618'0	633'0	620'2	619'4
4	621'0	621'0	614'4	603'0	601'2	603'0	609'0	616'2	621'2	625'8	628'2	625'4
5	621'3	620'8	612'0	603'8	598'8	602'0	607'8	613'4	624'4	624'0	621'8	622'2
6	624'8	620'0	616'4	609'8	603'4	597'2	600'0	609'6	613'7	614'0	616'2	616'0
7	622'8	623'0	618'0	605'0	596'2	598'0	603'8	605'0	605'0	613'0	613'0	615'2
8	450'7	539'0	538'0	545'2	589'0	580'0	593'5	612'0	611'0	610'4	601'0	597'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	613'0	607'0	609'0	603'2	598'0	598'4	600'0	609'0	608'8	610'4	608'4	608'4
11	607'8	602'7	600'0	596'4	596'8	602'5	602'8	607'9	607'0	607'2	602'8	603'0
12	604'8	601'2	596'0	594'0	593'5	596'8	601'9	606'0	608'0	619'1	607'7	601'0
13	599'5	600'9	592'5	588'0	583'0	585'6	590'0	599'0	608'0	614'0	614'2	610'2
14	608'0	607'0	597'0	589'8	586'5	590'0	597'0	610'8	628'0	622'8	618'2	614'2
15	581'5	596'5	610'2	604'4	580'4	581'2	598'8	613'2	619'8	607'8	622'0	614'0
16	—	—	—	—	—	—	—	—	—	—	—	—
17	598'8	594'4	586'2	577'9	569'0	575'6	594'6	612'0	611'2	611'4	619'0	609'0
18	595'9	598'0	591'2	589'2	583'5	577'1	568'0	586'0	588'0	597'0	597'4	605'0
19	599'0	589'0	596'9	590'0	593'2	595'5	597'0	602'0	607'0	603'0	601'5	604'0
20	599'0	596'0	593'0	581'8	589'0	588'0	594'0	595'4	607'5	610'0	611'4	630'5
21	603'0	597'5	591'0	588'4	586'4	590'0	597'4	599'0	600'0	616'0	616'2	611'2
22	605'8	604'5	598'4	597'0	596'2	591'8	589'8	594'9	600'8	602'7	605'0	604'0
23	—	—	—	—	—	—	—	—	—	—	—	—
24	605'4	602'2	598'0	594'8	594'0	597'6	600'1	600'9	608'0	611'0	609'4	612'5
25	613'0	612'4	605'0	602'0	595'0	594'0	598'0	604'0	611'0	614'0	606'8	611'0
26	607'0	614'0	613'0	602'0	598'0	599'5	604'0	612'8	611'4	611'0	609'8	612'2
27	625'0	624'1	619'0	605'0	596'8	602'0	611'2	621'8	636'0	643'2	645'8	643'5
28	600'0	600'8	604'8	597'2	588'8	595'4	607'0	609'0	609'0	609'4	608'2	608'2
29	599'8	593'9	592'0	570'0	568'5	596'2	608'4	605'8	612'4	597'8	608'0	601'0
30	—	—	—	—	—	—	—	—	—	—	—	—
31	616'6	619'0	613'8	608'7	596'0	590'5	611'0	618'0	622'0	623'0	631'0	624'0
Hourly Means	608'57	607'33	603'97	597'27	592'40	594'20	600'25	607'32	612'92	614'97	615'48	614'53
TEMPERATURE OF THE BIFILAR MAGNET.												
MAY.												
1	48'5	49'3	50'2	51'0	51'4	51'4	51'4	51'9	52'4	53'1	53'0	52'6
2	—	—	—	—	—	—	—	—	—	—	—	—
3	48'5	49'0	51'5	51'6	51'6	51'6	51'7	52'2	52'5	52'5	53'0	53'6
4	51'7	52'5	53'6	54'2	54'5	54'8	55'5	55'6	55'8	56'1	56'2	56'4
5	52'5	53'3	54'3	55'2	56'1	56'8	57'2	57'8	58'5	59'1	59'5	59'5
6	54'0	54'9	55'4	56'5	58'1	58'4	59'0	60'0	60'7	61'8	62'3	62'5
7	57'6	57'8	58'8	60'2	61'3	62'2	62'4	62'9	63'2	63'5	63'5	63'5
8	60'0	60'0	59'9	60'5	61'2	61'4	61'6	61'3	61'3	62'0	62'8	63'2
9	—	—	—	—	—	—	—	—	—	—	—	—
10	58'1	58'5	59'0	59'0	60'8	62'0	62'2	62'4	62'8	63'4	63'6	63'6
11	61'7	61'4	61'2	61'4	62'3	63'2	64'0	64'5	64'9	65'4	65'6	65'3
12	63'0	63'3	64'1	65'5	66'1	66'8	67'4	67'4	67'9	67'5	67'2	67'0
13	63'5	63'4	64'4	65'2	66'4	66'2	66'0	66'0	66'3	66'5	66'5	66'8
14	61'0	61'8	62'2	64'0	65'1	65'0	65'2	65'2	65'2	65'2	65'4	65'2
15	59'5	60'4	61'2	62'0	63'0	63'9	64'3	64'8	65'5	66'3	66'9	67'1
16	—	—	—	—	—	—	—	—	—	—	—	—
17	60'0	60'6	60'8	61'5	62'4	63'3	63'6	64'4	65'0	65'5	65'8	65'8
18	60'0	60'4	61'0	61'8	62'6	63'5	64'5	65'0	65'7	66'4	66'7	66'8
19	62'0	62'8	62'6	62'9	63'7	64'4	64'7	65'4	65'9	66'5	67'0	67'0
20	62'0	64'0	62'4	62'5	63'1	63'6	64'0	64'0	64'5	64'7	65'0	65'0
21	59'4	59'0	59'0	59'0	59'4	60'0	60'5	61'2	61'8	62'5	63'0	63'1
22	60'0	61'0	61'3	61'6	62'0	62'8	63'5	64'0	64'5	65'2	65'4	65'4
23	—	—	—	—	—	—	—	—	—	—	—	—
24	61'4	61'4	61'4	61'5	61'6	62'0	62'1	62'4	62'7	63'2	63'4	63'9
25	60'0	60'0	60'9	62'0	62'9	63'6	64'0	64'8	65'7	66'1	66'0	66'0
26	57'3	57'7	58'4	58'6	59'0	59'3	59'1	58'8	58'8	59'0	59'4	59'7
27	56'0	56'7	58'0	58'6	59'6	60'0	60'5	61'0	61'2	61'8	62'2	62'3
28	57'8	58'0	58'0	58'5	59'6	60'4	61'3	62'6	63'6	65'0	65'6	66'0
29	61'5	61'1	63'6	64'0	64'5	65'3	65'3	65'4	65'5	65'6	65'9	65'8
30	—	—	—	—	—	—	—	—	—	—	—	—
31	58'5	58'1	58'0	57'5	57'5	57'4	56'9	56'8	56'4	56'2	56'5	56'4
Hourly Means	58'40	58'85	59'33	59'87	60'60	61'10	61'42	61'78	62'18	62'59	62'85	62'90

* Off scale.

* Seven minutes late.

* Nine minutes late.

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
634°0	620°2	617°2	633°5	623°8	617°5	628°8	630°0	629°7	627°9	9°6	624°0	623°03
621°8	621°3	623°2	620°6	618°8	621°9	622°0	622°8	622°0	621°4	3°0	619°0	620°71
621°1	621°0	620°0	617°7	617°0	620°0	619°2	623°0	620°0	622°0	621°5	621°0	618°04
620°0	620°0	619°0	616°0	618°0	620°0	620°0	620°2	622°0	623°0	623°4	626°2	617°50
616°5	614°8	613°5	614°2	615°8	612°4	612°6	617°0	618°5	613°2	624°5	614°8	613°70
625°0	620°2	594°6	603°5	586°4	592°0	539°8	—	473°5	279°4	534°7	454°3	574°84
595°8	593°6	593°0	594°0	595°0	595°6	—	605°0	607°2	600°0	608°5	609°5	586°71
606°2	603°9	601°9	601°0	604°0	603°7	604°0	608°0	601°0	606°0	607°0	607°4	605°45
603°4	602°5	602°0	602°5	603°0	604°8	603°5	605°0	600°2	598°0	600°8	599°8	602°68
596°0	599°5	600°0	600°8	603°0	603°8	600°4	600°0	599°8	601°4	600°2	601°5	601°10
610°4	610°8	601°2	602°0	600°8	603°0	599°6	600°3	601°9	602°2	604°5	608°0	601°23
602°2	605°0	609°0	600°2	611°1	610°9	609°5	610°0	607°0	604°6	593°9	596°2	605°75
615°8	609°2	584°9	608°0	614°0	614°4	—	590°0	592°0	594°0	598°2	594°2	601°56
604°0	593°7	589°0	581°0	579°0	583°8	576°0	588°2	584°8	584°5	595°0	598°0	592°34
606°2	593°0	589°0	591°2	591°4	595°6	593°0	596°0	596°8	596°0	598°8	598°1	592°56
608°8	587°0	598°8	612°5	583°8	586°0	593°2	593°1	593°7	589°8	592°1	592°0	596°20
601°4	600°0	593°2	600°9	597°1	601°0	596°9	594°2	598°8	598°4	596°0	598°0	598°81
613°2	602°1	592°9	591°0	590°8	602°0	599°0	602°0	598°0	600°2	598°0	603°4	599°57
605°2	602°3	602°0	602°5	600°7	600°3	—	613°0	606°0	604°2	604°2	606°0	601°80
609°0	610°0	608°5	607°4	607°3	603°2	603°2	607°8	605°0	607°8	610°0	612°0	605°21
610°4	603°2	601°4	598°2	594°0	597°0	596°2	597°8	595°0	602°4	601°2	606°0	603°21
610°0	611°4	613°5	613°0	614°2	616°0	616°9	617°5	618°8	619°0	618°8	622°0	611°91
610°0	604°8	606°3	606°0	609°2	584°5	597°8	608°0	612°0	604°2	602°5	608°0	613°61
612°2	611°5	604°0	601°0	604°2	611°0	616°0	602°0	553°5	583°7	576°5	604°1	600°72
604°0	598°8	597°0	595°4	596°0	596°2	—	609°2	611°0	612°2	612°0	611°0	600°45
—	—	—	—	—	—	620°0	616°1	618°8	621°0	627°8	627°0	618°60
626°0	623°2	620°0	619°2	622°2	628°4	—	—	—	—	—	—	—
611°11	606°86	604°72	606°38	605°00	605°50	605°39	607°13	606°66	606°66	607°98	608°54	606°31

TEMPERATURE OF THE BIFILAR MAGNET.

52°6	52°3	52°3	51°7	51°6	51°3	—	—	—	—	—	—	50°62
53°6	53°7	53°7	53°5	53°4	52°6	47°2	47°5	47°8	48°0	48°1	48°2	50°62
53°0	53°6	53°5	53°4	51°9	51°2	53°8	53°4	53°4	53°4	53°0	52°3	54°52
56°2	56°4	56°4	56°4	57°0	56°8	56°4	55°8	55°0	54°7	54°4	53°8	56°56
59°5	59°5	59°5	60°5	60°2	59°8	59°4	59°0	58°4	57°8	57°4	56°5	59°06
62°3	62°5	62°5	62°2	61°8	61°5	61°2	—	60°8	60°8	60°7	60°6	61°46
63°5	63°5	63°5	63°0	62°6	62°2	61°3	61°0	60°9	—	—	—	60°95
62°8	63°2	63°2	63°0	62°6	62°4	62°2	62°0	61°8	61°8	62°0	61°6	61°81
63°6	63°6	63°6	63°2	62°5	62°4	62°2	62°0	61°8	61°8	62°0	61°6	61°81
65°2	65°6	65°6	64°4	64°0	64°0	63°6	63°5	64°0	63°5	63°0	63°0	63°64
66°9	66°0	66°0	65°9	65°5	65°3	65°3	65°0	64°8	64°6	64°1	63°6	65°63
67°2	67°0	67°0	67°0	65°8	65°4	64°0	63°2	62°6	62°1	61°6	61°2	64°95
66°5	66°8	66°8	65°2	65°0	64°6	64°0	63°6	63°2	62°7	62°0	61°4	63°45
65°4	65°2	65°2	67°4	67°1	66°6	65°8	65°4	65°0	—	—	—	—
66°9	67°1	67°1	65°9	65°5	64°8	64°1	63°7	63°3	62°9	62°4	61°9	63°70
65°8	65°8	65°8	66°9	66°5	66°1	65°8	65°5	65°2	64°6	64°3	63°8	63°19
66°7	66°8	66°8	67°0	67°0	66°6	66°2	64°5	64°2	63°5	63°0	62°5	64°53
67°0	67°0	67°0	65°0	64°6	64°0	63°5	63°3	62°9	62°5	62°0	61°4	63°13
65°0	65°0	65°0	63°2	62°9	62°6	62°0	61°8	61°2	61°0	60°8	60°5	61°00
63°0	63°1	63°1	65°4	65°1	64°7	64°5	64°3	64°0	—	—	—	—
65°4	65°4	65°4	63°9	63°7	63°5	63°2	63°0	62°5	62°2	61°8	61°4	62°37
63°4	63°9	63°9	65°6	65°3	65°0	64°6	64°2	63°5	62°4	61°0	60°0	62°85
66°0	66°0	66°0	59°8	59°6	59°2	58°6	58°1	57°8	57°5	57°0	56°6	58°27
59°4	59°7	59°7	62°5	62°3	61°9	61°4	61°2	60°8	60°2	59°4	58°5	60°03
62°2	62°3	62°3	66°4	66°4	66°2	66°0	65°8	65°6	65°4	65°2	65°0	63°56
65°6	66°0	66°0	66°0	65°5	65°0	64°2	64°0	63°7	—	—	—	—
65°9	65°8	65°8	—	—	—	—	60°4	60°0	59°6	59°5	59°2	63°56
56°5	56°4	56°4	56°2	55°8	55°6	55°5	55°5	55°5	55°5	55°5	55°5	56°41
62°85	62°90	62°92	62°64	62°22	61°73	61°44	61°04	60°27	59°83	59°43	59°11	60°82

HORIZONTAL FORCE.												
One Scale Division = 0.00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JUNE.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	618.0	620.0	620.0	615.0	599.5	592.0	611.8	617.0	615.4	634.2	633.2	615.4
2	612.0	620.0	612.4	615.8	598.2	591.8	593.0	605.2	601.4	601.6	620.0	613.1
3	612.2	610.4	610.2	602.8	597.3	602.2	606.0	609.0	618.0	618.0	617.9	617.0
4	611.9	613.9	607.3	600.0	601.0	605.0	615.0	617.0	617.0	619.0	618.0	614.0
5	619.0	624.8	618.0	613.0	609.0	609.0	613.2	620.0	626.0	629.0	625.0	619.8
6	—	—	—	—	—	—	—	—	—	—	—	—
7	620.2	617.0	610.5	610.0	598.6	597.2	605.4	603.4	614.4	614.2	619.0	616.1
8	615.0	608.8	604.0	598.5	595.4	601.0	603.2	608.2	612.9	621.1	621.1	614.0
9	609.8	613.1	607.0	605.4	600.0	600.5	600.6	612.1	620.5	623.0	616.0	614.0
10	605.0	584.0	599.0	594.2	575.0	571.4	591.1	606.5	622.0	628.0	614.0	621.8
11	605.8	600.0	598.8	592.0	581.5	588.0	588.2	590.0	603.8	593.8	592.0	610.0
12	617.0	611.0	605.0	603.7	604.2	594.0	593.8	602.2	618.4	612.0	621.0	637.0
13	—	—	—	—	—	—	—	—	—	—	—	—
14	601.0	571.0	588.0	575.2	573.5	585.8	601.2	586.3	630.2	641.3	644.0	632.0
15	623.2	620.8	617.0	612.4	606.1	617.2	617.5	620.0	620.7	633.8	622.0	622.5
16	615.9	612.3	613.4	606.0	596.7	601.0	607.5	622.0	631.0	623.0	634.0	622.0
17	611.0	613.5	612.0	606.2	599.0	598.0	602.5	607.6	611.4	619.3	621.2	622.4
18	608.0	605.2	604.5	604.7	600.7	592.2	600.2	603.8	617.0	621.2	627.8	619.4
19	606.0	605.0	600.8	595.0	587.8	593.2	601.2	611.8	616.0	617.9	616.2	613.0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	618.0	614.3	611.8	597.0	602.6	601.2	601.0	601.5	614.8	616.8	621.8	619.0
22	617.0	612.0	601.0	613.0	604.0	595.0	596.0	600.0	606.0	607.5	607.0	605.0
23	614.0	611.0	603.5	594.8	590.0	584.8	585.6	593.0	594.0	600.8	604.1	606.1
24	612.8	611.0	604.6	598.0	593.0	593.5	593.0	602.0	607.8	613.8	611.2	607.0
25	606.0	603.0	597.0	595.0	590.0	594.0	601.8	605.0	607.2	610.5	603.0	598.0
26	604.8	605.8	600.2	596.0	593.0	597.0	600.0	601.9	611.0	610.0	603.0	595.6
27	—	—	—	—	—	—	—	—	—	—	—	—
28	607.0	607.4	601.1	592.0	589.0	593.0	594.2	603.0	604.8	597.2	602.0	607.2
29	606.0	605.5	604.0	602.4	605.4	592.5	596.2	609.8	598.2	605.4	608.2	607.9
30	603.2	604.8	601.0	594.2	585.0	579.0	588.1	598.3	607.0	614.0	608.0	602.5
Hourly Means	611.53	608.79	605.85	601.24	595.21	595.10	600.70	606.02	613.46	616.40	616.87	614.30
TEMPERATURE OF THE BILAR MAGNET												
JUNE.	1	55.7	55.6	55.6	56.2	56.9	57.6	58.4	59.4	60.0	60.3	61.0
	2	59.2	59.2	59.4	60.0	60.7	61.5	62.3	63.0	63.2	63.0	64.0
	3	59.8	60.5	61.2	61.5	61.8	62.4	63.0	63.4	64.0	64.4	64.5
	4	61.0	61.0	61.8	61.9	62.6	62.6	63.5	63.7	63.7	64.3	64.4
	5	57.0	57.4	57.9	58.0	58.8	59.5	60.0	61.0	61.4	62.4	63.0
	6	—	—	—	—	—	—	—	—	—	—	—
	7	59.0	59.4	60.5	61.7	62.8	62.8	64.0	64.8	65.4	66.7	67.0
	8	62.3	62.3	62.0	62.4	62.5	62.9	63.2	63.8	63.5	64.0	64.4
	9	61.6	61.7	62.1	62.8	63.6	64.8	65.5	66.2	67.3	68.4	69.7
	10	67.3	67.3	67.3	67.3	67.2	67.5	67.5	67.5	67.5	67.5	67.3
	11	65.0	65.4	65.7	66.0	66.4	66.8	67.0	66.8	66.9	66.8	66.5
	12	60.0	60.5	61.4	62.0	62.0	62.6	62.6	62.8	63.4	63.8	64.4
	13	—	—	—	—	—	—	—	—	—	—	—
	14	59.0	59.0	59.0	59.0	59.0	59.0	58.6	58.0	57.5	57.4	57.1
	15	53.4	53.0	53.0	53.0	53.3	54.0	54.5	55.2	56.0	57.5	58.6
	16	57.4	58.0	58.8	59.4	59.9	60.6	61.0	61.4	61.9	62.0	62.2
	17	56.8	57.0	58.4	60.3	60.6	61.1	61.7	62.1	62.5	63.2	63.6
	18	58.7	59.8	60.8	61.0	62.0	62.8	64.0	64.6	65.0	65.4	65.3
	19	62.2	62.2	62.2	62.2	62.5	63.0	63.4	63.6	63.9	64.1	64.5
	20	—	—	—	—	—	—	—	—	—	—	—
	21	61.5	62.5	63.4	64.2	65.4	65.6	66.0	66.0	66.2	66.4	66.6
	22	62.2	62.4	62.1	63.4	63.6	64.0	64.5	65.5	66.3	66.9	67.4
	23	63.5	63.5	65.2	66.1	67.0	67.4	67.4	68.0	68.1	68.8	69.8
	24	65.3	66.1	67.2	67.9	68.5	69.2	69.4	70.0	70.3	71.1	71.6
	25	66.0	66.5	66.9	67.4	68.0	68.9	69.6	70.4	71.5	72.5	72.6
	26	68.9	69.5	70.4	71.6	72.1	73.0	73.3	73.8	74.0	74.5	74.9
	27	—	—	—	—	—	—	—	—	—	—	—
	28	70.9	70.5	70.4	70.4	70.4	71.0	71.3	71.5	72.1	72.8	73.4
	29	67.9	67.7	67.7	68.3	68.6	69.4	69.7	70.6	71.6	72.0	72.2
	30	66.2	67.0	68.0	68.9	70.0	70.6	71.0	71.4	71.8	71.9	72.4
Hourly Means	61.84	62.12	62.63	63.19	63.70	64.25	64.71	65.17	65.58	66.08	66.47	66.67

* Nine minutes late.

* Eight minutes late.

HORIZONTAL FORCE

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1 °C. rise in Temperature, 1' 6.9

No. 1, 63.		One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° of Temperature, f' 63.														Daily and Monthly Means.	
10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	24°.	25°.	26°.	27°.
615'4	615'4	613'0	618'0	600'2	607'0	608'9	609'4	609'6	614'4	610'8	614'0	613'8	605'0	611'0	613'8	605'0	611'0
613'2	613'1	612'7	608'9	608'0	610'0	609'8	610'0	611'2	608'0	609'0	620'5	608'8	611'4	609'0	611'4	608'9	611'4
617'9	617'0	607'4	607'5	610'0	610'0	601'0	606'0	610'0	610'0	611'4	610'2	610'2	611'3	610'2	611'3	608'2	611'3
618'0	614'0	614'0	611'0	611'0	617'0	615'0	620'0	617'2	615'0	616'9	614'0	618'4	617'9	618'4	617'9	618'4	617'9
625'0	619'8	619'4	613'6	612'0	614'1	614'2	614'6	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	607'0	606'4	615'7	613'4	616'8	619'0	—	—	—	—
619'0	616'1	613'0	609'0	608'7	596'0	599'8	598'7	599'0	599'0	585'0	586'5	606'0	606'6	605'5	606'6	605'5	606'6
621'1	614'0	606'0	608'0	608'0	608'0	611'5	609'0	610'0	610'3	610'5	609'0	609'4	612'0	609'0	612'0	609'0	612'0
616'0	614'0	621'0	603'5	608'5	615'0	610'0	609'2	606'2	614'9	605'0	609'2	607'8	608'0	610'39	610'39	610'39	610'39
614'0	621'8	590'6	591'4	598'0	601'2	591'4	597'9	595'9	596'0	599'4	600'2	600'0	600'0	598'92	598'92	598'92	598'92
592'0	610'0	615'6	605'8	596'5	599'0	603'1	606'1	610'0	608'5	608'0	610'0	606'0	616'5	601'21	601'21	601'21	601'21
621'0	637'0	627'0	617'0	602'0	597'0	591'0	597'2	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	584'5	585'0	618'0	618'0	614'4	616'0	—	—	—	—
644'0	632'0	612'0	614'0	606'0	600'0	605'0	605'0	614'0	612'6	612'2	613'0	612'7	618'2	606'55	606'55	606'55	606'55
622'0	622'5	619'0	619'2	613'5	613'4	618'4	614'0	614'0	609'4	614'2	615'0	616'2	618'4	617'40	617'40	617'40	617'40
634'0	622'0	619'4	610'2	613'0	612'2	618'5	612'2	613'0	616'0	616'4	603'7	612'1	611'0	614'27	614'27	614'27	614'27
621'2	622'4	624'0	612'0	608'8	607'1	602'6	606'9	600'0	602'2	608'0	608'0	610'4	609'0	609'61	609'61	609'61	609'61
627'8	619'4	611'9	615'3	604'1	601'5	601'0	598'4	598'0	603'5	604'5	603'0	604'0	606'2	606'50	606'50	606'50	606'50
616'2	613'0	608'0	608'0	605'0	607'8	606'0	605'0	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	610'2	612'0	612'8	612'5	611'0	614'0	—	—	—	—
621'8	619'0	619'2	615'0	614'0	601'2	605'0	609'2	608'5	611'3	613'0	613'9	613'9	614'0	610'75	610'75	610'75	610'75
607'0	605'0	606'8	608'4	605'8	604'1	605'0	603'1	605'2	606'0	606'2	607'0	610'0	611'1	605'92	605'92	605'92	605'92
604'1	606'1	604'0	601'0	603'5	602'0	602'0	601'5	601'5	600'0	601'8	603'2	605'8	609'4	600'85	600'85	600'85	600'85
614'2	607'0	602'0	600'0	602'0	600'0	597'5	593'5	595'0	596'0	588'0	597'4	601'5	604'0	601'23	601'23	601'23	601'23
603'0	598'0	599'0	598'5	598'5	599'8	600'2	601'8	601'0	600'2	601'1	602'2	603'3	604'0	600'96	600'96	600'96	600'96
595'0	595'6	605'0	597'2	594'4	597'0	598'0	600'4	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	596'1	599'0	600'7	601'4	600'5	606'0	—	—	—	—
602'0	607'2	593'2	596'8	593'5	590'7	593'1	594'0	594'9	594'4	601'8	593'8	596'0	596'0	597'34	597'34	597'34	597'34
608'2	607'9	608'0	599'0	599'0	599'0	597'0	597'6	597'0	595'2	594'5	580'0	603'0	600'0	600'45	600'45	600'45	600'45
608'0	602'5	607'7	591'1	591'0	586'0	578'5	571'0	585'0	586'4	596'5	593'4	600'0	601'1	594'70	594'70	594'70	594'70
616'87	614'30	611'19	607'02	604'46	603'70	603'40	603'53	603'62	604'30	606'21	605'87	608'15	609'45	—	—	—	—

TEMPERATURE OF THE BIFILAR MAGNET

61°0	61°0	61°2	61°2	61°3	61°0	61°1	60°8	60°5	60°2	60°0	59°5	59°1	59°0	59°27
61°0	61°5	65°0	64°6	64°1	63°8	63°4	62°8	62°6	62°0	61°2	61°0	60°4	59°8	62°11
61°6	61°5	64°4	64°0	63°6	63°4	63°0	62°6	62°5	62°2	61°8	61°8	60°4	61°1	62°62
61°4	61°1	64°0	63°2	62°5	61°8	61°4	60°5	60°0	59°5	59°8	58°5	58°0	57°8	61°69
63°0	63°2	63°3	63°3	63°0	62°6	62°1	61°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	61°9	61°6	61°0	60°4	60°2	59°0	60°8
67°0	67°6	67°4	66°6	66°1	65°5	65°1	64°7	64°3	63°9	63°5	63°2	63°0	62°4	64°06
61°4	61°2	61°4	61°0	63°8	63°5	63°2	63°0	62°7	62°7	62°4	62°2	62°0	62°0	63°06
69°7	70°4	70°6	70°4	70°1	69°7	69°7	69°3	69°0	68°6	68°5	68°2	68°0	67°7	67°25
67°5	67°3	67°5	67°3	67°0	66°6	66°5	66°0	65°9	65°7	65°5	65°3	65°3	65°0	66°75
66°5	66°2	65°8	61°6	61°1	63°3	62°9	62°2	61°9	61°1	60°7	60°3	60°0	59°4	64°24
61°4	61°9	65°1	65°2	64°8	61°4	61°2	61°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	60°0	59°8	59°6	59°5	59°5	59°5	62°33
57°4	57°1	57°2	57°0	56°3	55°8	55°5	55°0	55°0	55°0	54°6	54°2	54°0	53°6	56°80
58°6	59°7	60°2	60°2	60°2	60°2	59°7	59°0	58°5	58°2	57°8	57°6	57°4	57°0	56°97
62°2	62°2	62°2	62°2	62°0	61°1	60°4	60°2	59°8	58°9	58°5	57°6	57°2	57°0	60°08
63°6	61°6	61°9	65°0	64°6	61°0	63°5	62°7	62°0	61°6	60°5	60°0	59°2	58°4	61°60
65°4	65°3	65°1	61°5	64°1	63°7	63°5	63°4	63°0	63°0	62°8	62°8	62°8	62°8	63°21
61°5	65°0	65°3	65°2	65°2	64°5	61°0	63°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	61°8	61°9	61°7	61°5	61°5	61°0	63°16
66°6	66°6	66°6	66°6	66°4	66°2	65°8	65°5	65°1	64°6	64°0	63°6	63°1	63°0	63°04
66°8	67°1	67°5	67°4	67°0	66°4	66°0	65°6	65°2	64°8	64°7	64°5	63°4	63°0	65°03
69°6	69°8	70°0	69°9	69°4	69°3	69°0	68°6	68°2	67°6	67°1	66°6	66°2	65°5	67°37
71°6	72°0	72°4	72°5	71°8	71°0	70°4	69°5	69°0	68°2	68°0	67°5	66°8	66°2	69°25
72°6	72°6	72°6	72°6	71°5	71°2	70°6	70°1	69°6	69°2	69°0	68°9	68°8	68°4	69°81
74°9	75°1	75°0	74°0	73°8	73°4	73°0	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	73°5	73°4	73°0	72°5	72°1	71°7	72°91
73°4	73°4	73°2	72°8	72°4	71°6	71°4	71°0	70°6	70°2	69°8	69°0	68°7	68°4	71°13
72°0	72°2	72°2	72°1	71°6	70°8	70°3	70°0	69°7	68°0	67°5	67°0	66°5	66°2	69°57
72°4	72°4	72°4	72°2	71°6	71°0	70°5	70°0	69°0	68°2	67°8	67°4	66°6	65°7	69°75
66°47	66°67	66°74	66°48	66°09	65°61	65°25	64°79	64°30	63°85	63°46	63°10	62°74	62°33	64°46

^c Seven minutes late.^d Five minutes later.

HORIZONTAL FORCE

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

[illegible]

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
AUGUST.	2	610'0	610'2	610'2	603'0	597'0	592'5	593'0	598'2	601'2	603'5	600'5
	3	614'0	610'0	603'0	604'0	594'8	589'8	592'0	600'1	597'8	608'9	607'0
	4	611'8	618'8	610'1	608'6	606'1	602'4	603'2	604'1	613'7	608'4	614'6
	5	576'0	567'0	566'6	550'0	579'0	578'5	549'0	582'5	591'0	605'0	583'5
	6	594'0	588'2	589'5	587'5	583'0	578'0	575'0	584'0	600'0	603'0	597'0
	7	598'2	596'0	577'5	572'5	580'0	572'5	575'0	581'4	588'2	601'8	608'0
	8	—	—	—	—	—	—	—	—	—	—	—
	9	593'0	597'0	592'5	585'0	580'3	579'8	587'3	595'0	603'1	606'0	621'0
	10	596'2	595'8	585'0	583'1	582'4	582'0	584'8	590'0	593'5	598'0	596'5
	11	597'0	594'0	586'0	578'2	578'0	578'5	580'0	583'5	591'0	591'2	596'0
	12	603'0	595'0	583'0	573'5	572'5	577'5	580'0	586'0	594'0	603'0	602'5
	13	602'2	602'0	593'0	582'0	571'0	566'5	575'8	587'0	592'8	603'2	600'8
	14	609'5	597'0	578'8	572'2	556'0	554'0	581'2	602'2	597'6	597'9	592'8
	15	—	—	—	—	—	—	—	—	—	—	—
	16	594'2	593'0	595'0	587'9	576'5	566'5	575'8	579'0	588'8	595'0	600'0
	17	608'8	609'8	600'0	594'5	584'4	577'0	581'0	581'5	605'0	596'0	594'0
	18	607'0	606'0	599'8	593'5	587'5	585'0	587'5	592'5	606'0	607'5	597'5
	19	610'0	612'5	607'5	602'0	600'8	598'0	606'0	619'0	618'8	620'2	612'2
	20	607'0	605'5	600'0	598'6	597'0	601'2	600'5	601'5	605'9	600'8	601'0
	21	614'8	610'0	600'2	590'0	587'0	590'5	597'2	609'8	612'2	611'0	624'0
	22	—	—	—	—	—	—	—	—	—	—	—
	23	600'8	598'0	591'5	583'0	576'0	573'5	582'8	591'0	597'5	601'5	607'0
	24	597'0	595'0	589'0	582'8	575'0	573'0	582'0	594'0	596'5	604'4	602'4
	25	595'5	585'0	568'5	571'0	569'0	552'0	573'0	509'6	598'4	596'2	595'0
	26	600'0	599'0	611'9	599'0	580'8	579'8	583'8	592'1	599'0	608'0	597'8
	27	601'0	598'8	591'2	583'2	579'0	580'0	579'6	586'7	603'0	605'5	615'0
	28	597'0	595'0	586'0	580'0	570'0	571'8	571'2	582'8	591'5	598'8	609'0
	29	—	—	—	—	—	—	—	—	—	—	—
	30 ^a	—	—	—	—	—	—	—	—	—	—	—
	31 ^a	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		601'62	599'11	592'45	586'05	581'75	579'18	582'87	591'76	599'32	602'67	603'57
TEMPERATURE OF THE DIAPHRAGM.												
AUGUST.	2	65'1	66'0	66'0	68'0	68'5	68'5	69'0	69'8	70'2	70'4	71'0
	3	65'9	66'4	67'0	68'0	69'0	69'8	69'8	69'6	70'0	70'6	71'0
	4	66'8	67'4	68'2	69'6	69'6	71'4	71'5	71'9	72'1	73'4	73'7
	5	68'1	69'0	70'0	71'4	72'4	73'4	73'4	73'5	74'0	74'5	74'2
	6	68'8	69'2	70'5	71'5	74'0	75'0	75'5	75'4	76'0	75'8	76'5
	7	69'5	69'5	70'5	70'2	70'6	71'5	72'2	72'6	72'9	73'2	73'4
	8	—	—	—	—	—	—	—	—	—	—	—
	9	67'4	67'5	67'5	68'0	68'5	69'6	70'2	71'1	72'6	74'0	75'0
	10	70'6	70'6	70'6	71'2	72'5	74'0	74'5	74'4	75'4	75'5	75'8
	11	72'4	72'4	72'6	72'5	73'0	72'5	73'0	73'5	73'5	73'5	74'5
	12	69'0	69'0	69'0	70'0	71'0	72'0	73'0	73'5	74'0	74'8	75'1
	13	71'5	71'8	72'8	74'0	74'6	75'5	76'0	75'4	76'2	76'3	75'6
	14	72'6	73'0	73'4	74'4	75'4	75'6	76'0	76'8	77'1	78'0	77'9
	15	—	—	—	—	—	—	—	—	—	—	—
	16	74'4	74'8	75'4	76'4	77'3	78'4	78'6	79'3	79'7	80'2	80'2
	17	74'5	75'2	75'5	76'2	76'0	76'5	76'4	76'0	76'5	76'5	76'0
	18	69'6	69'4	69'5	70'5	70'5	70'0	70'0	70'1	70'3	70'5	71'0
	19	64'5	65'0	64'0	64'0	64'7	65'2	65'5	65'5	65'6	66'5	67'0
	20	65'0	65'0	64'7	65'4	66'5	67'0	67'9	68'5	68'8	69'6	69'9
	21	64'8	65'2	66'0	66'6	67'3	67'5	67'7	68'0	68'4	69'7	70'5
	22	—	—	—	—	—	—	—	—	—	—	—
	23	65'4	66'5	67'5	68'3	69'2	69'5	70'0	70'0	70'8	71'0	71'5
	24	65'7	66'0	66'4	66'9	68'0	68'5	69'0	70'0	70'4	71'2	71'6
	25	65'8	65'8	67'5	68'5	70'0	70'8	71'3	71'8	72'6	73'5	73'4
	26	68'0	67'0	67'0	68'0	68'6	69'6	70'4	71'5	72'1	73'0	74'0
	27	69'2	68'8	68'3	69'0	68'9	69'1	68'8	69'0	69'4	69'8	70'5
	28	66'3	66'9	68'5	68'8	69'5	69'7	69'8	69'7	70'0	70'7	71'5
	29	—	—	—	—	—	—	—	—	—	—	—
	30 ^a	—	—	—	—	—	—	—	—	—	—	—
	31 ^a	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		68'37	68'61	69'12	69'89	70'65	71'27	71'65	71'95	72'41	73'01	73'32

^a The 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

HORIZONTAL FORCE.

One Scale Division = 0.00087 parts of the H.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.

1.63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
09.5	613.1	609.0	604.1	605.0	604.0	603.8	601.0	601.4	603.2	604.0	601.5	604.5	610.0	604.20
07.0	601.8	603.7	603.0	606.9	606.0	607.5	608.8	610.0	610.0	609.0	607.0	609.2	607.0	604.60
14.6	611.0	615.0	613.0	621.9	397.0	517.2	455.6	510.6	538.7	569.2	575.5	580.0	575.0	589.23
58.5	587.5	588.0	588.5	587.0	596.8	581.0	578.4	583.8	587.3	588.0	577.0	592.0	590.2	581.52
07.0	599.8	578.2	582.4	581.0	590.0	597.9	588.6	595.0	589.2	573.0	572.2	593.8	591.0	588.14
08.0	603.2	618.2	581.0	581.0	590.0	581.4	580.4	—	—	—	—	—	—	589.76
21.0	599.0	602.0	591.8	596.0	600.0	604.0	605.0	597.0	593.0	594.0	596.0	592.0	598.2	596.29
06.5	592.5	596.0	596.0	599.0	591.0	597.0	596.0	595.8	595.4	595.2	595.5	595.0	597.5	593.01
06.0	591.5	600.2	596.0	597.5	599.8	601.0	598.2	602.8	595.0	597.8	597.3	598.6	599.2	592.85
02.5	601.8	598.2	591.0	597.0	597.0	597.9	597.1	597.0	597.2	597.6	592.2	597.0	600.5	593.10
03.2	600.8	601.2	602.9	598.2	598.6	592.7	590.8	591.0	598.8	599.5	599.8	607.5	612.0	593.35
02.8	596.5	587.0	585.4	592.0	591.4	592.0	593.5	—	—	—	—	—	—	588.83
00.0	594.2	590.5	590.0	593.0	597.2	597.0	594.5	594.5	593.2	598.0	593.5	593.0	595.0	591.40
04.0	603.5	602.5	601.0	601.5	600.2	597.4	597.0	592.8	597.0	593.0	603.4	602.0	602.0	596.93
07.5	612.2	601.2	611.0	606.0	597.0	592.9	599.2	601.0	604.9	604.0	607.5	607.2	608.5	601.06
12.2	608.0	607.2	607.8	610.0	609.0	610.8	610.4	611.0	608.5	611.5	601.5	611.2	610.0	609.33
00.8	601.0	604.2	608.4	610.8	609.4	608.5	611.4	611.0	616.5	614.0	614.0	611.5	613.5	606.49
24.0	599.6	606.2	608.0	609.0	609.0	621.0	573.0	—	—	—	—	—	—	600.45
07.0	600.0	597.5	599.0	591.0	588.2	591.4	595.8	591.4	595.5	600.7	594.1	596.1	596.9	593.47
01.8	602.4	595.4	592.4	597.2	592.1	595.9	596.0	588.8	596.4	596.0	575.4	579.0	589.5	588.62
05.0	590.6	590.0	585.5	586.4	581.0	579.2	572.0	572.2	578.5	580.5	582.5	581.2	592.0	581.87
05.8	608.0	601.0	595.0	594.0	595.0	596.0	600.0	595.0	599.0	602.0	599.5	600.0	600.8	597.35
15.0	617.0	599.0	598.0	603.0	598.5	587.2	600.0	601.6	600.0	598.0	590.0	592.0	599.2	596.15
09.0	606.0	598.0	602.0	596.0	590.6	603.4	603.8	—	—	—	—	—	—	596.42
—	—	—	—	—	—	—	—	610.0	608.7	610.8	611.0	610.0	610.8	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
03.57	601.96	599.56	597.51	598.60	597.16	595.30	589.56	591.09	593.80	591.94	594.16	597.40	600.03	594.77

TEMPERATURE OF THE DIAPHRAGM.														
71.0	71.0	71.2	71.3	71.0	70.5	70.3	70.0	69.0	68.0	68.0	66.8	66.5	66.0	68.84
71.0	71.4	72.0	71.8	71.4	71.4	71.4	70.0	69.5	69.5	69.0	67.3	67.0	66.5	69.39
73.7	73.5	73.5	73.5	72.7	72.1	71.9	71.4	70.7	70.2	69.4	69.0	68.6	68.6	71.07
74.3	74.2	74.0	73.2	73.0	72.6	72.0	71.6	70.8	70.5	70.0	69.5	69.4	69.2	71.84
76.5	76.0	73.4	73.1	73.2	72.7	72.5	72.3	72.1	71.7	71.0	70.7	70.7	70.5	72.81
73.4	73.1	73.0	72.5	72.5	72.3	72.1	71.9	—	—	—	—	—	—	70.76
75.0	80.7	75.3	74.4	74.2	73.5	73.0	73.0	72.5	72.0	72.0	71.5	71.0	70.8	71.89
75.8	76.0	75.5	75.3	75.0	74.5	74.4	74.0	74.0	73.6	73.4	73.2	72.6	72.5	73.71
73.5	74.5	74.7	74.0	72.8	72.4	72.2	71.4	71.0	70.6	70.5	70.0	69.6	69.2	72.30
73.1	74.6	75.0	74.4	74.0	73.8	73.6	73.2	73.0	72.8	72.6	72.2	71.9	71.9	72.64
75.6	75.7	76.0	75.6	75.5	75.0	74.7	74.5	74.0	73.7	73.5	73.0	73.0	72.6	74.44
77.9	77.5	77.8	77.2	77.0	77.0	77.0	76.8	—	—	—	—	—	—	—
80.2	80.0	81.0	80.5	80.0	79.0	78.5	77.7	77.0	76.7	76.0	75.5	75.5	75.2	76.10
76.0	76.0	76.0	75.5	75.1	75.0	74.6	74.2	73.6	73.0	72.5	72.0	71.5	71.2	77.84
71.0	70.7	70.0	69.0	68.0	67.5	66.8	65.9	65.6	65.3	65.1	64.9	64.7	64.7	68.32
67.0	67.2	67.8	67.0	66.5	66.3	65.8	65.4	65.0	64.5	64.5	64.0	63.5	63.42	—
69.9	70.0	70.0	69.7	68.8	68.0	67.7	67.2	66.5	66.4	65.9	65.4	65.0	65.6	67.27
70.5	70.8	71.8	72.0	71.4	70.4	69.7	69.4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	68.4	67.8	67.4	66.8	66.4	66.0	68.33
71.5	71.5	71.5	71.0	70.7	70.4	69.6	69.2	68.6	68.0	67.5	66.8	66.5	66.0	69.04
71.6	72.2	72.4	72.0	70.9	69.8	69.5	69.0	68.2	68.2	67.6	67.2	66.4	66.2	68.90
73.4	73.5	73.6	73.0	72.1	71.5	70.6	70.2	69.8	69.5	69.5	69.5	68.0	67.0	70.37
74.0	73.2	73.0	72.7	72.4	72.2	71.0	71.0	71.0	70.7	70.4	70.0	69.6	69.6	70.73
70.5	70.4	70.7	71.0	71.0	70.5	70.2	70.0	69.4	69.0	68.5	68.0	67.5	66.6	69.34
71.0	71.5	71.6	71.0	70.6	70.4	70.2	70.0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	69.0	68.8	68.5	68.2	68.0	67.7	69.43
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
73.32	73.55	73.37	72.95	72.52	72.06	71.65	71.24	70.61	70.25	69.90	69.43	69.05	68.73	71.07

Diameter of the vertical

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1 ^a	—	—	—	—	—	—	—	—	—	—	—	—
2 ^a	—	—	—	—	—	—	—	—	—	—	—	—
3	602'0	601'2	600'7	593'0	588'0	593'0	594'0	599'5	606'0	604'0	623'0	623'0
4	606'2	596'0	598'0	593'5	591'0	596'5	603'0	602'0	607'0	611'5	616'0	615'0
5	—	—	—	—	—	—	—	—	—	—	—	—
6	615'0	610'2	605'5	593'0	583'0	585'0 ^b	586'0	592'0	602'5	600'2	612'8	614'2
7	611'0	606'2	602'0	589'8	578'2	584'0	586'8	596'8	607'0	609'8	615'7	610'0
8	611'8	605'5	597'7	587'0	579'4	576'0	581'6	590'0	598'0	604'1	604'0	606'0
9	621'4	601'0	595'0	591'5	593'8	580'0	595'6	588'5	600'0	617'0	618'0	600'0
10	600'4	600'0	599'8	592'0	586'0	585'0	592'0	607'0	616'0	620'5	617'0	622'8
11	610'5	605'0	598'5	588'5	579'5	575'0	580'0	586'8	595'8	605'8	612'5	612'0
12	—	—	—	—	—	—	—	—	—	—	—	—
13	598'5	582'0	573'0	581'0	557'2	574'2	571'0	581'6	608'2	600'2	604'8	610'4
14	621'2	617'8	608'0	600'0	597'0	601'1	608'5	615'0	624'0	624'0	624'2	620'5
15	620'9	616'1	607'0	596'0	590'0	594'0	598'0	598'0	604'0	614'0	617'0	620'0
16	627'0	626'0	625'0	615'0	598'0	591'0	589'0	591'5	605'0	610'0	625'5	620'4
17	614'0	613'0	608'0	598'0	583'0	579'0	586'0	591'2	594'8	601'0	603'4	606'0
18	613'0	607'5	597'8	585'4	578'0	582'5	582'2	586'1	596'8	595'6	606'5	608'5
19	—	—	—	—	—	—	—	—	—	—	—	—
20	617'8	614'2	606'8	596'8	585'0	586'1	594'8	594'0	609'4	618'0	621'0	619'0
21	615'8	612'2	604'0	598'9	592'0	588'0	593'0	603'0	615'0	619'0	618'0	616'5
22	617'0	618'0	612'5	600'0	609'0	604'5	601'5	607'0	631'0	620'0	607'4	613'8
23	611'0	608'0	603'4	602'2	605'0	602'5	611'0	619'0	605'0	612'5	613'0	623'1
24	597'0	—	—	502'8	491'8	439'9	490'2	603'7	515'0	602'7	584'0	577'7
25	570'3	563'0	557'0	548'1	546'1	546'2	555'0	572'2	581'0	585'0	583'0	586'5
26	—	—	—	—	—	—	—	—	—	—	—	—
27	598'0	577'7	475'8	518'5	545'4	557'5	551'0	563'5	597'5	602'0	592'0	580'0
28	582'0	577'5	574'0	564'0	560'0	565'0	572'5	581'5	589'0	598'0	598'5	590'2
29	600'5	602'0	596'5	593'0	589'0	577'2	513'0	608'0	616'0	631'2	646'8	612'0
30	602'5	605'0	600'0	593'4	584'8	580'0	578'2	576'2	583'1	605'8	609'2	606'5
Hourly Means	608'63	603'97	598'65	590'91	584'23	583'90	586'44	594'86	604'30	609'42	613'51	612'86
TEMPERATURE OF THE BIFILAR MAGNET.												
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1 ^a	—	—	—	—	—	—	—	—	—	—	—	—
2 ^a	—	—	—	—	—	—	—	—	—	—	—	—
3	66'5	66'6	66'7	66'7	67'7	68'5	69'0	70'0	70'3	71'3	71'7	71'4
4	66'7	65'4	65'3	65'0	65'0	65'2	65'2	65'2	65'2	65'2	65'2	65'1
5	—	—	—	—	—	—	—	—	—	—	—	—
6	62'1	62'5	63'5	65'0	65'0	65'0	65'3	65'6	66'2	66'8	67'4	67'6
7	63'7	64'2	65'2	66'6	67'6	68'2	68'4	68'6	68'7	68'9	68'7	68'5
8	66'4	66'6	67'4	67'6	68'6	70'0	70'9	71'5	71'7	72'0	72'0	72'0
9	65'8	65'5	65'2	65'0	64'9	65'4	65'4	65'6	66'0	65'8	66'0	66'1
10	61'5	61'7	62'2	63'0	63'7	64'2	64'3	65'0	65'4	66'0	66'4	66'4
11	60'1	60'0	62'0	62'7	63'5	64'0	64'4	64'6	65'2	65'6	66'2	66'4
12	—	—	—	—	—	—	—	—	—	—	—	—
13	62'7	62'5	62'5	62'6	62'5	62'8	62'5	62'5	62'3	62'0	61'4	60'5
14	59'5	56'2	56'4	56'5	56'7	57'0	57'2	57'4	57'8	58'2	58'9	58'9
15	54'2	55'0	55'7	57'2	57'8	58'2	58'8	59'3	59'8	60'5	61'7	62'5
16	56'4	57'0	57'5	58'8	60'0	61'0	61'4	61'9	62'0	63'0	64'0	64'3
17	59'5	59'3	59'8	60'9	62'2	63'3	63'9	64'4	64'8	65'2	65'5	65'5
18	62'9	63'0	63'3	63'3	63'6	64'0	64'2	64'5	64'5	64'6	65'0	64'6
19	—	—	—	—	—	—	—	—	—	—	—	—
20	60'8	61'2	61'2	61'4	61'5	61'7	62'0	62'4	62'5	62'4	62'8	62'8
21	60'0	60'2	60'8	61'7	62'0	62'3	62'9	63'3	63'5	64'2	64'9	65'4
22	57'5	58'0	59'0	60'0	60'5	61'2	61'8	62'4	62'6	63'5	64'2	64'8
23	60'5	60'5	61'3	62'2	63'0	63'8	64'0	64'5	65'3	66'5	67'0	67'4
24	67'5	—	—	63'2	63'0	63'1	63'1	63'3	63'3	63'3	63'3	63'3
25	61'0	59'2	59'0	59'2	59'5	60'0	60'3	60'7	61'0	60'9	61'4	61'0
26	—	—	—	—	—	—	—	—	—	—	—	—
27	62'1	62'5	62'7	63'0	63'5	64'0	64'5	65'5	66'2	67'5	68'3	68'5
28	64'7	61'5	61'5	62'1	62'1	62'6	62'6	62'4	62'7	62'7	62'4	62'2
29	56'8	56'5	56'9	57'0	57'4	58'0	58'6	58'4	58'4	58'8	58'6	58'5
30	55'0	55'0	55'0	57'2	58'0	58'4	58'8	59'0	59'0	59'0	59'4	59'7
Hourly Means	60'79	60'80	61'29	61'89	62'40	62'92	63'24	63'61	63'86	64'21	64'59	64'62

* The observations on the 1st and 24 days are omitted from the Means, the readings having been affected to an uncertain amount (up to four hours on the 24) by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

^b Eight minutes lat.

1' 63.

10h. 11h.

Sc. Div. Sc. Div.

623'0 623'0

611'5 611'5

612'2 612'2

610'0 610'0

606'0 606'0

600'0 600'0

622'8 622'8

612'0 612'0

610'4 610'4

620'5 620'5

620'0 620'0

620'4 620'4

606'0 606'0

608'5 608'5

619'0 619'0

616'5 616'5

613'8 613'8

623'1 623'1

577'7 577'7

586'5 586'5

580'0 580'0

590'2 590'2

612'0 612'0

606'5 606'5

612'86 612'86

61'4 61'4

65'1 65'1

67'6 67'6

68'5 68'5

72'0 72'0

66'0 66'0

66'4 66'4

66'2 66'2

61'4 61'4

58'9 58'9

61'7 61'7

61'0 61'0

65'5 65'5

65'0 65'0

62'8 62'8

61'9 61'9

61'2 61'2

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

61'4 61'4

61'0 61'0

HORIZONTAL FORCE.
One Scale Division = '000087 parts of the H.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
606'0	596'0	604'0	604'8	607'2	604'5	605'0	605'0	607'0	607'9	609'9	610'2	603'95
615'0	608'8	607'8	600'0	605'0	615'0	609'0	611'2	612'0	612'4	616'0	616'0	606'68
617'0	615'1	605'2	603'0	603'2	597'2	604'2	609'8	611'0	609'5	610'0	613'0	604'07
611'5	609'2	609'0	608'8	609'0	608'0	611'5	611'0	611'0	612'0	612'0	612'0	605'10
606'5	605'0	606'0	607'0	604'8	605'0	606'1	607'2	608'5	610'0	610'2	612'2	601'23
611'0	613'0	598'0	610'0	608'4	606'2	603'8	604'4	611'0	608'0	608'5	609'2	603'89
624'8	616'8	609'0	606'6	610'5	612'9	612'9	612'0	611'8	613'5	613'2	616'0	608'27
611'9	610'2	605'1	607'2	607'7	608'2	593'5	602'0	598'8	601'0	582'0	598'0	598'98
599'0	597'2	597'0	606'0	603'0	601'0	603'0	611'0	618'5	620'0	620'5	623'2	597'56
627'5	620'0	620'0	619'0	621'0	621'0	620'0	621'4	618'8	621'0	620'6	620'9	617'19
619'8	617'0	620'0	614'5	615'8	615'8	619'8	620'2	623'5	624'2	625'0	625'0	612'98
622'4	612'8	617'0	614'5	631'0	609'0	612'0	612'2	613'0	613'2	617'0	614'0	612'98
611'0	611'0	612'0	612'0	611'8	614'2	611'9	611'5	602'0	606'5	612'0	612'0	604'39
612'2	612'0	613'0	611'0	612'0	614'0	609'0	605'8	610'0	610'0	620'5	617'8	603'63
612'2	600'0	614'0	610'0	608'8	601'6	603'5	605'0	610'0	609'2	615'8	616'2	607'40
615'0	616'0	615'0	615'4	620'2	622'2	617'0	616'1	616'2	618'0	616'0	615'4	611'58
615'0	610'2	608'9	613'6	616'1	611'0	611'0	608'0	611'5	608'8	613'5	616'5	612'03
609'1	583'6	604'8	601'0	609'0	608'8	584'8	554'0	537'5	570'5	579'5	531'0	595'51
594'2	583'0	561'4	561'3	560'2	561'5	537'5	559'0	553'8	569'0	573'5	576'0	555'24
586'5	586'5	588'8	591'5	592'0	592'0	566'2	565'0	580'0	527'6	518'0	472'2	566'24
584'0	576'0	583'0	587'2	589'8	575'0	594'4	586'0	582'0	581'9	583'8	583'4	548'56
580'0	577'5	585'0	591'0	596'4	597'7	593'0	601'6	600'0	593'5	591'4	595'5	585'74
598'7	605'5	581'0	585'0	589'8	571'0	579'0	605'5	597'5	600'0	601'0	608'0	598'88
610'0	614'4	610'0	610'0	609'5	610'0	612'0	611'0	611'0	612'0	613'0	613'2	602'53
610'10	606'67	606'07	606'72	608'74	606'76	604'01	605'04	605'48	604'95	607'07	603'07	602'76

TEMPERATURE OF THE BIPOLAR MAGNET.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
71'0	70'0	69'5	68'8	68'6	68'3	67'6	67'1	66'6	66'4	66'1	65'7	68'42
65'1	64'8	65'0	65'0	64'9	64'8	61'7	64'3	63'9	63'7	63'2	62'8	64'83
67'9	67'7	67'4	66'9	66'7	65'9	65'7	65'2	65'0	64'6	64'4	64'0	65'56
68'5	67'8	67'6	67'5	66'7	66'7	66'7	67'0	66'6	66'5	66'5	66'5	67'16
72'0	72'0	71'5	71'0	70'6	69'7	69'0	68'2	67'8	67'5	67'0	66'3	68'55
66'2	65'5	65'0	65'0	64'6	64'2	63'6	63'1	62'7	62'1	61'9	61'7	64'68
66'6	66'2	65'6	64'9	64'1	63'6	63'2	62'9	62'2	61'5	61'2	60'5	63'85
66'4	66'0	65'0	64'4	64'0	63'8	63'5	63'5	63'4	63'2	63'0	63'0	63'91
60'2	59'7	59'4	58'5	58'5	58'0	57'7	57'2	57'0	57'0	56'7	56'8	60'15
59'5	58'8	58'4	57'7	57'0	57'0	56'5	56'2	56'0	55'4	55'1	54'6	57'08
63'0	62'3	61'5	61'0	60'6	60'2	59'8	58'9	58'5	58'0	57'5	57'2	59'13
64'0	63'5	63'0	62'1	61'5	61'1	61'0	60'6	60'2	60'0	60'0	59'5	60'99
64'8	64'4	63'0	63'7	63'2	62'6	62'3	62'3	62'3	62'8	63'0	63'0	62'99
64'7	64'7	64'3	63'7	63'6	63'6	61'0	61'0	61'0	61'0	61'0	60'2	63'22
62'5	62'0	62'0	61'5	61'2	61'0	60'6	60'3	60'2	60'1	60'2	60'0	61'43
65'5	64'5	64'0	63'2	62'5	62'2	61'2	60'5	60'0	59'5	59'0	58'4	62'15
64'8	64'8	64'3	63'5	63'0	62'8	62'4	62'2	61'8	61'5	61'0	61'0	62'02
67'1	66'7	66'5	66'2	65'5	65'4	65'0	64'6	64'4	64'4	64'0	63'5	64'55
63'2	62'9	62'5	62'0	62'0	62'0	61'9	61'5	61'3	61'0	60'8	60'2	62'44
61'2	61'3	61'2	61'0	61'0	61'0	60'6	60'6	60'8	61'2	61'5	61'6	60'63
68'0	67'6	67'0	66'6	66'2	65'6	65'0	64'2	63'7	63'2	62'9	62'4	65'03
62'0	61'4	60'8	60'5	60'0	59'2	58'8	58'3	57'9	57'0	56'5	57'0	60'67
58'5	58'5	58'2	58'4	58'3	57'5	57'2	57'0	57'5	57'3	56'2	55'0	57'60
59'8	59'2	59'0	58'5	58'0	57'6	57'6	57'6	57'9	58'0	58'0	58'0	58'07
64'60	64'17	63'74	63'32	62'91	62'55	62'08	61'75	61'53	61'30	61'05	60'74	62'67

to four hours on the

VOL. III.

* Three minutes late.

* Fifteen minutes late.

* Off Scale.

L

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F.													
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
OCTOBER.	1	Sc. Div. 612'2	Sc. Div. 610'0	Sc. Div. 611'8	Sc. Div. 603'8	Sc. Div. 596'2	Sc. Div. 593'2	Sc. Div. 592'0	Sc. Div. 598'0	Sc. Div. 600'5	Sc. Div. 604'2	Sc. Div. 615'0	Sc. Div. 606'0
	2	616'4	616'8	613'0	602'0	594'0	609'2	613'0	604'5	613'0	608'3	611'0	610'0
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	622'0	620'0	620'0	619'0	613'5	611'0	605'0	613'0	616'5	616'1	617'0	621'0
	5	623'5	618'0	609'0	600'0	600'0	605'0	610'0	614'0	611'2	619'0	622'8	606'0
	6	617'5	613'0	603'2	599'2	592'0	593'0	598'2	603'0	609'6	613'1	611'8	613'6
	7	615'8	610'2	604'4	597'6	592'0	592'0	598'0	612'2	612'8	618'2	619'2	622'0
	8	607'2	603'7	604'0	597'0	595'0	596'2	599'5	610'0	622'5	619'0	608'0	613'0
	9	617'8	615'0	609'0	605'0	595'0	601'5	603'0	602'0	608'0	618'0	621'0	627'2
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	618'8	616'5	610'0	607'0	599'0	599'0	604'0	611'5	614'2	607'2	624'0	624'4
	12	630'8	623'0	613'0	614'2	605'8	607'5	615'0	624'0	626'0	619'2	617'2	627'8
	13	625'0	611'0	540'0	567'0	589'0	595'0	617'0	610'0	610'0	611'0	613'0	599'0
	14	616'4	611'0	606'2	591'0	603'5	603'8	599'0	610'0	611'0	615'5	618'5	620'0
	15	626'8	626'0	622'0	614'0	603'0	607'5	604'0	614'5	613'0	620'0	621'0	620'2
	16	619'5	618'8	613'0	612'0	605'7	597'5	609'0	615'0	608'2	619'5	620'2	620'9
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	619'2	612'0	611'0	592'2	601'2	604'2	602'9	599'0	600'1	606'0	601'3	607'8
	19	613'0	600'0	596'0	590'1	606'5	592'4	584'0	597'3	597'3	601'0	605'0	611'2
	20	621'0	618'2	607'0	605'0	599'7	597'0	601'2	607'0	604'0	612'5	619'0	621'6
	21	621'0	617'5	614'8	611'0	603'8	594'1	600'0	604'0	611'0	619'5	620'2	623'0
	22	630'5	625'5	618'0	619'0	613'0	609'0	608'0	613'8	620'2	625'8	626'6	619'0
	23	403'0	38'0	423'3	399'6	587'4	522'6	627'7	600'7	607'0	525'4	577'7	630'0
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	585'3	551'2	460'0	503'8	544'2	590'6	597'5	554'0	628'0	590'0	606'0	601'5
	26	607'0	601'0	598'8	595'0	591'4	589'0	597'0	602'5	606'5	609'5	609'6	608'0
	27	628'0	624'0	616'0	607'8	600'4	596'5	599'0	603'0	612'2	618'0	622'0	627'5
	28	633'5	629'0	623'4	615'0	604'0	600'0	606'5	615'0	622'0	623'0	626'0	632'0
	29	620'0	640'0	611'0	628'0	618'8	612'2	610'5	602'0	609'7	616'0	620'8	623'0
	30	631'5	629'4	622'0	617'9	607'0	604'0	609'2	614'0	619'0	622'7	626'0	621'5
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		619'95	616'96	610'85	605'63	601'25	600'26	602'73	608'04	611'29	614'80	617'25	618'53
TEMPERATURE OF THE BILAR MAGNET.													
OCTOBER.	1	57'4	58'2	59'0	59'0	58'7	59'0	59'0	59'0	59'2	59'4	59'8	59'9
	2	54'2	54'4	55'2	56'7	57'8	58'2	59'0	59'8	60'6	61'9	62'2	62'5
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	55'0	55'4	56'4	58'2	59'0	59'6	60'3	61'2	61'7	62'2	62'4	62'4
	5	60'0	60'0	60'0	60'5	60'7	61'5	62'5	62'9	63'7	64'8	65'3	65'2
	6	61'5	61'5	61'4	61'2	61'3	61'4	61'8	62'0	61'9	62'1	62'1	62'0
	7	62'4	61'9	61'8	61'6	61'5	61'7	61'9	61'9	61'7	61'7	61'8	61'8
	8	62'1	62'1	62'1	62'1	62'4	62'8	63'0	63'0	63'0	63'0	63'2	63'0
	9	58'9	58'0	59'8	60'2	60'8	60'8	60'9	60'9	61'0	61'7	62'0	62'0
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	54'2	54'6	55'5	56'4	56'3	56'5	56'5	57'0	57'4	57'5	57'6	57'8
	12	54'5	54'5	54'5	54'6	55'0	55'2	55'3	55'0	54'4	54'6	54'8	54'5
	13	53'4	53'2	53'3	53'5	53'4	53'5	53'6	53'9	54'4	54'5	55'0	55'3
	14	50'8	50'2	50'0	50'9	51'4	52'2	52'8	53'3	53'4	53'5	53'5	53'0
	15	47'4	47'3	47'5	47'0	48'5	50'0	50'8	51'0	51'4	51'8	51'9	52'0
	16	50'9	51'0	51'9	52'9	54'0	54'5	55'0	55'8	56'4	57'4	58'0	58'0
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	56'1	55'5	56'5	57'4	57'6	58'8	59'4	60'2	61'5	62'5	63'0	62'9
	19	59'4	58'6	58'6	59'5	59'5	60'0	60'0	60'4	61'0	61'5	61'9	61'1
	20	54'0	53'4	53'8	54'0	55'7	56'5	57'0	57'3	57'5	58'6	59'5	59'5
	21	55'4	54'3	54'0	54'4	54'6	55'1	55'1	55'5	55'5	55'9	55'5	55'4
	22	52'5	52'0	51'9	51'9	51'9	52'4	52'5	52'6	52'8	53'2	53'4	53'0
	23	52'9	52'6	52'6	53'1	54'1	54'9	55'5	55'8	56'8	57'8	59'0	59'0
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	55'6	55'4	55'6	55'5	56'1	56'3	56'4	56'6	56'5	56'4	55'6	54'5
	26	49'0	49'0	49'4	49'4	49'6	49'8	50'1	50'1	49'8	50'3	50'3	49'5
	27	43'9	43'4	43'5	44'3	45'4	45'8	46'1	46'9	47'7	48'4	48'4	48'6
	28	44'8	44'5	45'8	47'0	48'3	49'0	49'4	49'7	50'6	51'7	51'8	51'6
	29	48'1	48'5	48'7	49'3	51'3	52'2	52'5	53'0	53'6	54'2	55'1	54'3
	30	52'0	51'4	51'4	52'2	53'0	54'0	55'0	55'7	55'7	56'2	56'6	56'3
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		54'18	53'99	54'40	54'95	55'56	56'12	56'52	56'89	57'21	57'77	58'03	57'90

* Not included in the Means, on account of disturbance.

1863.

0h. 11h.

Sc. Div.	Sc. Div.
50°0	606°0
1°0	610°0
—	—
7°0	621°0
22°8	606°0
1°8	613°6
19°2	622°0
8°0	613°0
21°0	627°2
—	—
24°0	624°4
17°2	627°8
13°0	599°0
18°5	620°0
21°0	620°2
20°2	620°9
—	—
04°3	607°8
05°0	611°2
19°0	621°6
20°2	623°0
26°6	619°0
77°7	630°0
—	—
06°0	601°5
09°6	608°0
22°0	627°5
26°0	632°0
20°8	623°0
26°0	621°5

617°25 618°53

59°8	59°9
62°2	62°5
—	—
62°4	62°4
65°3	65°2
62°1	62°0
61°8	61°8
63°2	63°0
62°0	62°0
—	—
57°6	57°8
54°8	54°5
55°0	55°3
53°5	53°5
51°9	52°0
58°0	58°0
—	—
63°0	62°9
61°9	61°1
59°5	59°5
55°5	55°4
53°4	53°0
59°0	59°0
—	—
55°6	54°5
50°3	49°5
48°4	48°6
51°8	51°6
55°1	54°3
56°6	56°3
—	—

58°03 57°90

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
608°0	612°8	614°5	615°0	612°0	610°8	613°5	616°8	616°6	616°8	618°2	618°0	609°00
612°0	613°5	614°0	615°0	615°2	615°0	—	620°0	621°0	622°0	622°8	623°4	613°60
—	—	—	—	—	—	620°0	621°0	622°0	622°8	623°4	621°2	618°37
620°2	620°5	620°0	620°0	619°3	622°1	619°8	620°2	620°0	620°8	620°8	623°0	612°99
613°0	612°4	614°2	615°0	613°2	613°0	615°2	614°0	615°0	615°5	616°8	616°0	611°34
614°8	616°0	615°8	618°5	619°0	617°0	619°0	616°0	616°0	615°5	618°0	619°4	613°70
620°0	619°8	619°5	620°5	621°0	632°0	623°0	627°2	614°8	607°8	612°2	616°6	609°56
620°0	607°0	607°5	611°4	616°8	604°2	612°7	615°0	615°4	614°2	615°0	615°2	613°69
614°6	623°4	609°1	609°0	614°8	616°1	—	—	—	—	—	—	617°91
—	—	—	—	—	—	619°0	618°4	618°0	621°4	619°8	622°5	630°0
625°8	625°8	621°0	622°0	621°8	623°0	623°0	620°0	624°8	628°0	629°0	630°0	616°12
628°6	635°0	631°2	626°0	615°4	611°5	609°0	595°5	601°0	604°0	606°0	600°2	606°03
609°0	605°0	608°0	612°0	612°0	612°5	613°0	614°2	616°4	617°0	619°7	619°0	616°44
621°5	621°0	620°0	617°5	621°8	624°2	624°0	626°9	627°0	626°0	628°8	630°0	619°48
611°0	616°2	620°4	624°1	621°0	628°0	628°3	625°0	624°8	623°0	622°2	628°5	613°88
624°1	606°1	622°3	619°6	620°0	620°4	—	—	—	—	—	—	609°05
—	—	—	—	—	—	607°5	608°5	611°8	613°7	601°5	618°2	607°18
611°2	609°7	610°0	611°5	610°0	615°5	615°9	614°5	611°9	614°5	616°2	616°5	611°92
613°0	614°7	613°0	606°5	613°0	605°9	615°0	616°2	618°0	620°2	620°4	621°2	620°05
618°0	618°0	617°2	611°8	611°2	609°5	611°0	609°0	615°3	616°0	615°5	620°5	620°13
625°0	625°8	626°8	627°1	627°6	628°0	629°0	629°0	629°0	632°0	631°8	630°0	592°37
621°0	614°4	619°0	618°0	619°0	631°0	632°8	611°3	583°0	503°0	222°5	480°5	481°35
632°0	594°0	581°0	565°5	543°0	565°0	—	—	—	—	—	—	583°12
—	—	—	—	—	—	187°0	366°0	108°8	479°0	434°2	554°5	611°72
586°0	590°0	592°5	596°0	599°0	600°0	603°0	598°2	602°4	603°8	605°0	606°9	621°44
617°5	619°8	621°0	620°2	620°0	618°8	622°2	621°6	624°2	625°5	626°8	628°5	625°13
630°2	627°8	630°2	628°7	631°1	633°0	628°0	629°4	629°0	630°8	631°0	631°0	620°21
630°0	630°9	630°0	634°0	632°8	633°0	632°4	633°0	633°0	632°0	624°5	628°0	626°04
623°0	628°2	618°8	621°5	626°0	625°0	624°6	620°2	627°0	627°5	615°0	616°2	621°04
625°6	618°8	623°0	624°0	621°0	623°2	—	—	—	—	—	—	615°17
—	—	—	—	—	—	622°2	625°0	624°2	623°0	625°8	622°0	—
619°41	619°24	619°07	619°04	619°55	619°51	619°74	619°20	619°95	620°50	619°94	621°49	615°17

TEMPERATURE OF THE BIFILAR MAGNET.

59°8	59°5	59°2	58°0	57°6	57°0	56°9	56°6	56°4	56°2	55°6	54°9	58°14
62°0	61°1	60°5	60°2	60°0	59°5	—	—	—	—	—	—	58°47
—	—	—	—	—	—	57°0	56°6	56°4	56°0	55°9	55°5	60°15
62°1	61°6	61°4	61°2	61°0	61°0	60°6	60°4	60°2	60°2	60°1	60°0	62°70
64°6	64°4	64°0	63°8	63°6	63°2	63°0	62°5	62°5	62°2	62°2	61°8	61°78
61°9	61°7	61°7	61°7	61°7	61°8	62°0	62°0	62°0	62°0	62°0	62°1	61°88
61°8	61°5	61°5	61°5	61°9	61°9	62°0	62°0	61°9	62°3	62°6	62°5	62°03
63°2	63°2	63°0	62°4	61°8	61°4	61°2	61°2	60°6	60°1	59°5	59°3	59°43
61°7	61°4	61°0	61°0	60°5	60°2	—	—	—	—	—	—	55°99
—	—	—	—	—	—	56°0	55°8	55°6	55°4	55°4	55°4	54°33
57°6	57°1	56°6	56°4	56°2	55°5	55°2	54°5	54°5	54°3	54°3	54°3	51°0
54°8	54°5	54°4	54°3	54°1	54°0	53°8	53°7	53°5	53°4	53°4	53°4	50°95
55°0	55°3	55°8	53°0	52°6	52°5	52°2	52°0	51°8	51°7	51°5	51°0	50°43
53°5	53°5	51°0	50°6	50°3	50°3	49°8	49°1	48°5	48°0	47°6	47°4	55°81
51°9	51°8	51°6	51°5	51°1	51°4	51°0	50°8	50°6	50°7	50°6	50°8	60°38
58°0	57°4	57°0	56°8	56°7	56°5	—	—	—	—	—	—	54°9
—	—	—	—	—	—	57°3	57°0	57°0	56°9	56°8	56°4	57°16
63°0	62°5	62°4	62°1	61°6	61°3	61°1	61°0	61°0	61°0	60°5	60°2	54°03
61°9	59°8	59°5	58°8	58°6	58°0	57°7	57°2	56°6	55°8	54°9	54°9	55°66
59°5	59°5	59°5	59°2	58°8	58°2	57°5	57°3	57°0	56°5	56°4	55°7	53°80
55°5	54°6	54°0	53°6	53°2	52°6	52°4	52°2	51°9	52°0	52°0	52°5	54°31
53°4	52°3	52°1	52°3	52°1	52°2	52°2	52°2	52°4	52°3	52°3	52°3	52°52
59°0	57°9	57°7	57°4	56°6	56°2	—	—	—	—	—	—	53°80
—	—	—	—	—	—	53°7	54°0	54°3	54°5	55°0	55°6	53°80
55°6	55°0	52°7	52°5	52°3	51°9	51°5	51°3	51°0	50°7	50°3	49°8	48°10
50°3	48°5	48°0	47°8	47°6	47°0	46°4	45°5	45°0	44°7	44°5	44°1	46°49
48°4	48°5	48°2	47°5	47°0	46°7	46°7	46°4	46°3	46°0	45°8	45°5	49°01
51°8	50°0	50°0	49°5	49°2	49°0	48°8	48°8	49°0	49°0	49°1	48°0	52°52
55°1	54°3	54°1	54°0	53°7	53°5	53°2	52°6	52°5	52°5	52°5	52°3	54°31
56°6	56°1	55°6	55°1	55°0	55°0	—	—	—	—	—	—	56°05
—	—	—	—	—	—	52°9	53°0	53°4	53°6	54°0	53°9	—
57°74	57°30	57°01	56°68	56°42	56°15	55°59	55°30	55°14	54°99	54°85	54°59	56°05

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
NOVEMBER.	1	617°0	615°9	615°0	613°0	610°5	616°0	594°5	606°0	603°8	610°0	620°0
	2	605°2	605°0	601°2	600°0	597°0	597°5	596°0	599°0	602°4	600°5	602°2
	3	610°0	610°0	610°0	609°0	600°0	593°0	591°8	598°2	607°2	605°4	607°2
	4	623°5	620°0	616°0	609°2	602°0	597°2	595°8	596°1	606°0	605°0	601°0
	5	623°2	620°0	622°8	614°1	608°1	605°1	610°6	615°0	618°9	620°0	624°0
	6	631°0	627°8	622°2	612°7	608°0	617°5	605°0	612°0	630°0	621°5	621°5
	7	—	—	—	—	—	—	—	—	—	—	—
	8	637°0	623°0	624°0	621°4	620°5	612°5	609°5	615°0	610°5	609°0	621°0
	9	633°0	622°5	615°0	605°0	603°4 ^b	596°0	593°0	592°5	606°2	614°4	608°8
	10	625°0	627°0	623°0	614°0	601°2	596°5	598°0	606°2	610°0	605°8	613°6
	11	630°0	624°4	618°2	607°0	596°0	590°3	593°2	596°0	608°5	618°0	623°0
	12	633°1	630°3	623°0	615°0	607°0	601°2	603°2	609°0	621°0	624°5	632°0
	13	638°0	632°4	628°0	621°5	615°0	597°5	597°0	617°0	613°0	622°0	636°0
	14	—	—	—	—	—	—	—	—	—	—	—
	15	639°0	638°0	632°5	621°0	619°0	604°0	609°0	616°2	620°0	629°6	636°0
	16	649°5	650°0	635°0	618°2	619°0	614°8	608°2	605°0	610°0	630°3	617°1
	17	631°8	630°6	625°0	614°0	608°2	607°2	605°0	602°0	615°0	624°0	629°0
	18	631°0	626°6	618°0	617°0	623°5	622°0	621°2	621°5	624°0	620°8	632°0
	19	630°8	631°0	624°5	619°0	615°0	610°0	614°0	624°0	635°0	665°0	622°4
	20 ^c	630°5	550°0	627°0	637°4	609°0	608°0	610°0	622°2	635°8	636°8	641°2
	21	—	—	—	—	—	—	—	—	—	—	—
	22	650°0	646°5	640°0	631°0	625°2	592°8	644°5	627°5	661°0	649°0	648°0
	23	604°2	601°2	598°8	596°0	593°0	595°0	594°0	599°0	602°5	596°0	600°5
	24	604°4	604°0	602°0	594°5	586°7	584°0	586°5	593°0	604°0	607°0	608°7
	25 ^c	604°0	604°8	607°0	598°5	600°0	602°0	583°0	576°0	597°0	599°0	632°2
	26	604°5	604°5	575°0	606°0	604°0	598°0	596°0	604°2	609°2	621°0	623°9
	27	631°4	630°2	627°0	615°8	615°0	619°0	615°3	615°0	624°0	628°8	633°5
	28	—	—	—	—	—	—	—	—	—	—	—
	29	657°2	652°0	652°0	646°5	642°3	638°0	633°0	641°0	642°0	648°0	651°0
	30	658°2	656°0	651°3	647°5	645°0	638°0	638°0	642°0	641°0	643°0	647°0
Hourly Means	628°17	625°32	618°67	612°93	610°50	606°53	604°69	609°91	615°83	620°44	622°37	621°43
TEMPERATURE OF THE BIFILAR MAGNET.												
NOVEMBER.	1	53°9	54°0	54°1	54°4	55°0	55°3	56°4	56°7	57°3	57°9	58°6
	2	57°2	57°2	57°1	57°4	58°8	59°3	59°9	60°3	60°9	61°5	62°0
	3	58°6	58°3	58°5	58°5	59°0	59°2	59°7	60°1	60°2	60°1	60°0
	4	57°8	57°2	57°2	54°5	58°6	59°4	59°7	60°0	60°0	60°4	61°0
	5	54°4	53°8	53°4	53°4	53°6	54°1	54°5	54°7	54°9	55°8	56°0
	6	51°1	50°6	51°0	51°5	51°6	51°9	52°3	52°3	52°8	53°5	53°1
	7	—	—	—	—	—	—	—	—	—	—	—
	8	49°4	50°0	49°9	50°0	50°5	51°1	51°6	52°4	52°8	53°4	53°9
	9	55°8	56°2	56°2	56°2	56°5	57°0	57°5	57°8	58°4	59°2	59°1
	10	52°2	52°2	52°0	52°4	52°3	52°4	52°5	52°6	52°7	52°6	52°0
	11	50°4	50°0	50°0	50°0	49°8	50°5	51°2	51°4	51°3	51°0	51°0
	12	49°4	48°4	49°0	49°3	49°8	50°0	50°8	50°9	51°1	51°2	50°7
	13	49°2	49°0	49°0	49°7	49°9	50°7	51°0	51°5	51°7	52°0	51°8
	14	—	—	—	—	—	—	—	—	—	—	—
	15	47°2	47°3	47°4	47°9	48°5	49°5	49°5	49°6	50°5	50°0	49°7
	16	47°0	47°0	47°0	47°4	47°6	48°4	49°2	50°0	50°3	51°0	51°1
	17	53°2	53°0	53°0	52°7	53°0	53°6	54°0	54°2	54°2	54°9	55°3
	18	54°2	54°0	53°6	53°2	53°5	53°8	54°0	54°0	53°6	54°1	54°3
	19	51°3	51°0	50°4	49°5	48°8	48°8	48°3	48°2	48°0	47°8	47°0
	20	42°5	42°5	43°0	43°9	44°4	45°2	46°0	46°2	46°6	47°1	46°4
	21	—	—	—	—	—	—	—	—	—	—	—
	22	45°7	46°0	46°4	47°0	47°4	48°7	49°8	50°4	51°2	51°6	52°2
	23	51°6	51°0	50°8	50°6	50°6	51°6	52°0	52°8	53°2	54°2	54°4
	24	55°5	55°4	55°4	55°0	55°2	55°8	56°0	56°1	56°2	56°3	56°5
	25 ^c	54°2	54°2	53°9	53°9	54°8	55°0	55°0	54°8	54°5	54°5	54°6
	26	49°0	48°0	47°4	47°0	46°9	47°3	47°5	47°4	46°8	46°5	46°9
	27	45°6	45°5	44°9	44°7	45°2	46°0	46°2	46°2	46°6	47°2	47°0
	28	—	—	—	—	—	—	—	—	—	—	—
	29	34°5	34°4	34°2	34°2	34°1	35°1	35°6	36°5	37°5	38°2	39°0
	30	35°8	35°8	35°5	36°1	37°7	38°5	39°4	39°8	40°0	40°8	41°2
Hourly Means	50°62	50°40	50°30	50°42	50°72	51°27	51°69	51°98	52°22	52°59	52°73	52°50

* Thirteen minutes late.

b Two minutes late.

c Not included in the Means, on account of disturbance.

e. 1° 63.

10h. 11h.

Sc. Div. Sc. Div.

602°0 613°0

602°2 598°8

607°2 609°7

601°0 611°0

624°0 628°0

621°5 626°0

632°0 638°8

630°8 613°1

613°6 614°0

623°0 620°4

632°0 636°0

636°0 625°0

636°0 638°0

617°1 629°0

629°0 623°5

632°0 628°5

622°4 625°7

641°2 641°3

648°0 659°0

600°5 598°0

608°7 596°0

632°2 643°8

623°9 610°0

633°5 612°5

651°0 652°0

647°0 651°0

652°37 621°43

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
642°0	642°0	637°2	591°4	554°0	582°0	580°2	576°0	584°2	591°1	601°2	600°8	600°31
599°9	605°8	601°0	604°2	602°2	597°0	599°3	590°4	612°0	602°4	612°2	607°0	601°59
607°2	612°0	611°8	607°0	607°4	607°5	607°4	604°0	614°5	610°0	608°0	620°0	607°15
613°4	613°8	615°0	614°1	611°0	618°0	616°8	616°0	620°2	622°5	622°0	622°0	612°11
627°5	631°4	629°5	629°1	633°0	626°0	625°0	623°8	624°2	615°2	624°8	628°5	621°99
629°0	628°5	630°0	629°2	630°0	631°2	—	—	—	—	—	—	625°30
630°2	626°8	625°2	616°0	623°7	624°6	626°0	625°0	625°2	627°5	627°0	630°3	622°70
610°0	606°2	603°9	611°7	610°0	611°0	611°8	621°0	621°0	622°0	626°5	626°0	611°92
622°4	614°0	618°2	619°0	611°5	612°5	603°4	620°0	628°0	627°0	626°0	629°5	615°24
623°0	619°2	617°0	625°0	625°0	617°0	622°0	631°0	632°0	630°8	631°2	630°2	617°97
631°5	633°0	610°0	632°2	627°2	629°2	632°8	632°7	631°5	630°2	631°1	632°0	625°36
622°0	635°0	636°8	635°0	635°0	633°0	—	—	—	—	—	—	627°71
637°0	637°0	637°0	633°9	634°0	637°0	636°8	633°0	635°0	637°0	637°2	637°8	630°45
629°0	629°2	627°2	623°7	627°2	625°2	628°0	629°0	630°0	630°0	631°2	633°7	626°35
620°5	615°0	614°0	627°0	629°0	625°5	622°1	625°8	625°0	624°2	622°4	629°0	620°62
621°0	631°0	632°0	627°2	630°0	628°0	630°0	630°0	631°2	623°5	625°3	629°0	626°03
632°2	641°8	628°4	636°0	639°6	612°0	627°0	629°0	629°0	630°0	631°2	632°0	628°53
638°0	635°0	637°0	638°0	637°8	639°4	—	—	—	—	—	—	631°01
616°0	654°0	629°0	611°0	471°0	661°0	578°0	590°0	579°0	577°0	592°0	597°0	619°15
601°3	606°3	605°0	605°0	603°1	603°0	602°0	602°4	601°2	603°2	601°0	605°0	600°82
624°5	621°0	623°7	621°0	593°2	582°8	600°8	596°2	603°7	601°0	595°9	598°3	601°36
636°8	638°0	648°7	585°5	567°1	574°4	567°7	534°2	538°4	597°4	575°0	598°5	596°21
624°3	607°0	614°1	629°0	629°0	622°0	620°0	621°5	621°5	619°9	621°9	627°5	613°08
626°0	630°2	631°0	633°0	635°0	632°0	—	—	—	—	—	—	631°81
654°0	656°0	654°0	654°0	655°8	655°0	654°8	655°0	655°4	656°0	656°4	655°7	650°71
653°0	651°0	651°0	652°2	652°2	653°3	652°2	652°8	651°7	650°0	644°3	648°8	648°77
623°69	625°79	624°91	624°17	621°66	620°21	621°97	622°58	626°02	625°25	626°80	628°32	620°34

TEMPERATURE OF THE BIFILAR MAGNET.

58°6 58°4

62°0 62°0

60°0 60°0

61°0 60°8

56°0 55°0

53°7 53°1

53°7 53°9

59°3 59°1

52°5 52°0

51°2 51°0

50°7 50°5

52°0 51°8

49°7 49°1

51°1 51°2

54°9 55°3

54°3 54°0

47°0 47°0

47°2 46°4

52°2 52°5

54°4 54°4

56°5 56°4

54°6 54°0

46°9 46°9

47°0 45°7

39°0 38°8

41°2 41°2

52°73 52°50

58°2	57°5	57°5	57°6	57°5	57°8	58°0	57°5	57°4	57°2	57°0	56°9	56°75
61°4	61°1	60°5	60°2	60°0	59°9	59°5	59°2	59°1	59°0	58°7	58°7	59°64
60°0	60°0	60°0	59°9	59°9	59°4	59°2	59°5	59°3	59°0	58°1	58°42	59°42
60°5	60°3	59°5	58°8	58°5	58°2	57°3	56°2	56°0	55°6	55°5	55°3	58°43
54°8	54°6	54°3	53°9	53°6	53°5	53°5	53°2	53°0	52°8	52°2	51°5	53°94
53°0	52°6	52°0	51°5	51°3	51°0	—	—	—	—	—	—	51°12
53°8	54°6	54°5	54°5	54°2	54°2	48°0	48°0	48°4	48°5	48°5	48°8	52°97
54°7	57°5	57°0	56°2	56°0	55°4	55°0	54°0	54°0	54°6	54°8	55°2	52°28
52°3	52°2	52°0	51°8	51°8	51°8	51°8	51°5	51°4	51°3	51°0	50°7	52°00
51°0	50°8	50°6	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°42
50°6	50°4	50°4	50°4	50°7	51°3	51°2	50°5	50°2	50°1	49°2	49°2	50°22
51°8	51°4	50°6	50°1	49°8	49°1	—	—	—	—	—	—	49°60
49°4	48°8	48°5	48°2	48°0	47°8	47°5	47°5	47°4	47°2	47°4	47°0	48°37
51°3	51°4	52°0	52°0	52°0	52°3	52°5	52°5	52°5	52°5	52°9	53°0	50°59
56°0	56°0	56°0	55°5	55°5	55°5	55°5	55°2	55°0	54°8	55°0	54°7	54°61
54°4	54°2	54°4	54°5	54°6	54°6	54°6	54°0	53°6	53°1	52°5	51°6	53°85
47°8	47°2	46°6	46°5	46°1	45°1	44°7	44°5	44°5	43°9	43°8	43°0	47°08
46°0	45°0	45°0	44°9	44°7	44°7	—	—	—	—	—	—	44°94
52°9	52°6	52°5	52°0	52°0	52°3	52°6	53°0	52°0	51°7	51°7	51°8	50°67
54°9	55°0	55°2	55°2	55°5	55°7	55°6	55°4	55°3	55°1	55°5	55°9	53°81
57°0	56°5	56°2	56°0	55°7	55°5	55°4	54°9	54°5	54°2	53°7	53°4	55°53
54°2	54°0	53°0	53°0	52°9	52°8	52°6	52°0	51°7	51°4	50°5	49°5	53°37
47°0	46°6	46°8	46°8	46°7	46°5	46°2	46°0	45°0	45°3	45°5	45°6	46°73
45°5	44°8	44°9	44°5	44°3	44°1	—	—	—	—	—	—	42°57
38°6	37°8	37°4	37°5	37°4	37°0	37°0	37°2	37°2	36°8	36°4	35°6	36°58
41°9	41°5	41°4	41°4	40°8	40°7	41°0	40°5	40°5	40°8	40°5	40°2	39°71
52°60	52°30	52°10	51°87	51°73	51°58	50°79	50°49	50°36	50°23	50°12	49°93	51°31

disturbance.

HORIZONTAL FORCE.												
One Scale Division = $\frac{1}{1000000}$ parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.												
Mean Guttin- gen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
DECEMBER.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	653.0	651.0	650.0	649.0	647.5	646.0	646.0	663.0	663.0	653.0	652.0	644.8
2	636.5	636.0	646.0	647.5	646.5	642.0	639.0	641.2	629.5	619.8	620.4	630.0
3	622.1	628.2	633.0	628.0	609.2	616.5	610.2	615.6	617.1	626.0	632.2	633.0
4	647.0	645.0	640.0	639.6	615.7	633.8	630.6	633.0	627.0	630.0	638.9	640.2
5	—	—	—	—	—	—	—	—	—	—	—	—
6	650.8	650.0	645.6	644.0	637.0	631.4	636.0	638.0	637.5	641.0	642.8	647.0
7	654.0	654.2	651.0	647.0	646.0	640.0	640.0	640.8	645.0	647.5	647.4	655.4
8	665.0	644.0	638.0	637.0	620.0	624.0	622.0	625.0	629.2	633.0	634.8	634.6
9	634.0	636.0	639.0	621.0	617.4	603.0	620.0	621.4	626.0	628.0	630.6	635.5
10	635.4	633.2	638.2	628.0	616.2	620.0	612.4	612.0	612.0	622.5	618.0	620.5
11	638.5	630.9	627.0	630.0	621.0	615.0	614.8	608.6	618.0	622.0	609.0	620.0
12	—	—	—	—	—	—	—	—	—	—	—	—
13	646.0	645.8	645.0	631.0	625.0	613.0	620.0	620.0	631.0	635.0	642.0	640.8
14	642.0	648.0	649.0	639.5	633.0	621.1	626.0	622.8	624.2	634.0	642.2	644.0
15	649.5	650.3	648.0	645.2	636.0	630.5	626.8	628.5	633.1	633.5	646.0	646.0
16	654.2	654.4	655.2	649.0	644.0	639.0	637.0	647.0	652.2	660.4	669.0	664.0
17	639.0	643.4	655.0	677.0	582.0	652.5	593.0	590.4	612.5	611.0	632.0	626.0
18	631.0	627.0	609.0	603.0	634.0	620.0	615.0	617.0	634.0	635.0	636.0	634.2
19	—	—	—	—	—	—	—	—	—	—	—	—
20	120.8	151.2	292.2	251.7	461.5	495.5	502.0	505.8	619.0	635.1	692.5	659.0
21	614.0	620.0	611.0	604.0	612.2	616.0	612.0	617.8	617.5	616.0	625.5	629.0
22	641.4	643.2	640.0	622.2	636.0	633.7	620.3	622.0	626.0	620.0	635.8	641.0
23	643.5	640.0	640.0	637.0	630.0	631.5	623.8	626.0	637.3	637.0	640.8	637.0
24	646.0	644.8	646.0	645.0	642.5	636.7	631.0	631.0	639.0	645.0	641.2	647.0
25	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—
27	665.0	663.0	658.0	655.0	649.2	640.0	642.0	646.0	652.0	649.0	660.0	663.0
28	660.0	660.2	657.8	654.1	648.0	639.0	635.0	638.0	643.4	649.2	652.2	656.0
29	652.0	650.5	651.0	643.5	639.2	634.0	645.0	629.5	640.2	621.5	626.4	626.0
30	635.0	635.0	635.0	631.5	627.5	620.5	619.5	612.0	616.4	617.5	628.0	630.2
31	630.3	630.0	630.8	629.0	624.0	620.0	622.8	624.0	625.0	625.8	628.0	631.2
Hourly Means	643.88	644.05	642.90	638.92	630.63	629.25	626.05	627.61	631.42	632.40	637.30	639.26
TEMPERATURE OF THE BILAR MAGNET.												
DECEMBER.	1	40.4	40.3	40.5	41.0	41.9	42.4	43.0	43.5	44.0	44.6	45.2
	2	46.8	46.7	46.0	46.0	46.0	46.5	47.4	48.0	48.1	49.0	48.8
	3	46.5	46.2	46.0	46.0	46.0	46.4	46.6	46.4	46.1	46.0	45.2
	4	44.6	41.3	43.6	43.6	43.6	44.0	44.0	44.0	44.2	44.4	44.3
	5	—	—	—	—	—	—	—	—	—	—	—
	6	41.6	41.6	41.2	41.2	42.6	43.4	44.5	44.8	45.2	45.5	45.2
	7	43.2	43.5	43.5	43.7	44.3	44.9	45.5	46.4	47.5	48.9	49.2
	8	47.0	46.5	46.1	46.4	46.9	48.0	48.6	49.2	49.4	49.8	49.7
	9	51.5	51.4	50.5	50.4	50.4	50.6	50.6	50.5	50.0	50.5	50.7
	10	54.0	53.8	53.6	53.9	53.8	54.4	54.7	55.4	55.0	55.2	55.0
	11	51.6	51.1	51.0	51.2	51.3	51.4	51.5	51.7	51.5	52.2	52.3
	12	—	—	—	—	—	—	—	—	—	—	—
	13	49.0	49.0	49.7	48.5	48.5	48.8	48.9	49.4	49.5	49.5	49.5
	14	47.3	47.2	46.2	46.4	46.5	47.5	48.1	48.4	48.3	48.2	47.4
	15	47.4	47.1	47.2	46.7	47.3	48.1	48.4	48.1	48.1	48.8	48.7
	16	41.4	41.4	41.3	40.2	39.4	39.1	39.5	40.2	40.5	41.2	41.3
	17	38.5	38.5	37.5	37.4	38.0	38.0	39.0	40.3	40.4	42.0	42.8
	18	40.0	40.0	38.9	38.8	39.4	39.8	40.5	41.2	41.6	42.5	42.9
	19	—	—	—	—	—	—	—	—	—	—	—
	20	40.6	39.9	39.4	39.0	38.1	38.3	38.6	38.8	39.0	38.8	37.5
	21	34.6	35.4	35.2	35.0	35.2	35.7	35.8	36.4	36.7	37.5	36.9
	22	38.2	38.4	38.4	38.4	38.6	39.1	40.0	41.0	41.5	42.4	42.5
	23	41.6	41.4	40.5	40.0	39.6	39.9	39.5	39.0	39.4	39.8	40.5
	24	38.6	38.2	38.2	38.7	39.0	39.5	39.5	40.5	40.6	41.3	41.6
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	32.5	33.1	33.0	33.0	33.2	33.8	34.0	34.0	33.8	34.0	33.0
	28	37.9	38.2	38.2	38.7	39.2	39.6	40.0	40.7	41.4	41.9	42.0
	29	45.0	45.0	45.1	45.4	46.7	47.2	48.4	48.9	48.9	49.3	48.9
	30	49.4	49.9	50.1	50.3	50.5	51.3	51.4	51.4	51.4	51.9	52.1
	31	52.5	52.6	53.0	53.0	53.0	53.0	52.9	52.9	52.8	53.4	53.6
Hourly Means		44.21	44.20	43.98	43.96	44.23	44.69	45.07	45.46	45.61	46.14	46.18

* Not included in the Means on account of disturbance.

* Christmas Day.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

10, 1° 63.		One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.													Daily and Monthly Means.	
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.			
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
552° 0	644° 8	645° 0	649° 5	654° 0	651° 0	647° 0	645° 0	645° 9	646° 2	624° 0	644° 0	648° 2	639° 0	648° 21		
620° 4	630° 0	621° 0	616° 9	619° 0	611° 5	611° 0	613° 0	621° 2	610° 0	615° 0	628° 0	629° 6	631° 0	628° 78		
632° 2	633° 0	631° 4	636° 0	635° 0	638° 8	637° 0	633° 0	640° 0	637° 9	639° 0	641° 0	643° 0	645° 8	630° 50		
638° 9	640° 2	641° 5	653° 0	649° 0	641° 0	643° 0	641° 0	—	—	—	—	—	—	641° 19		
—	—	—	—	—	—	—	—	641° 2	645° 4	648° 2	648° 8	651° 5	651° 1	—		
642° 8	647° 0	648° 0	648° 5	649° 0	649° 2	649° 4	649° 8	649° 2	650° 2	651° 0	652° 0	652° 7	652° 0	646° 05		
647° 4	655° 4	653° 0	651° 8	640° 8	637° 1	640° 6	639° 2	632° 0	634° 8	635° 0	631° 0	630° 0	630° 8	643° 11		
634° 8	634° 6	637° 1	630° 0	624° 4	618° 5	619° 0	630° 6	624° 0	610° 0	635° 0	633° 0	635° 0	626° 0	631° 63		
630° 6	635° 5	637° 0	639° 0	639° 2	637° 1	634° 2	632° 2	634° 3	629° 0	633° 0	633° 8	631° 0	635° 8	630° 31		
618° 0	620° 5	615° 0	613° 0	606° 0	605° 0	591° 0	590° 0	608° 5	616° 4	624° 0	635° 0	621° 8	623° 0	617° 38		
609° 0	620° 0	630° 0	622° 0	624° 0	630° 0	631° 8	633° 2	—	—	—	—	—	—	—		
—	—	—	—	—	—	—	—	637° 1	637° 8	637° 8	640° 0	641° 8	640° 4	627° 53		
642° 0	640° 8	645° 0	637° 8	634° 8	632° 9	638° 1	639° 1	638° 0	637° 0	641° 2	643° 0	642° 8	640° 9	635° 93		
642° 2	644° 0	642° 0	642° 0	641° 4	640° 2	641° 0	643° 4	642° 8	641° 7	643° 0	645° 0	642° 0	646° 5	639° 28		
646° 0	646° 0	646° 0	646° 8	646° 0	645° 8	646° 8	644° 0	642° 0	649° 5	645° 2	647° 5	650° 0	652° 0	643° 13		
639° 0	664° 0	663° 5	658° 7	643° 0	651° 0	652° 0	651° 0	644° 0	646° 8	645° 8	639° 5	638° 8	641° 0	650° 25		
632° 0	626° 0	625° 0	626° 0	635° 0	648° 8	618° 0	619° 2	626° 0	623° 0	622° 0	631° 0	612° 0	620° 2	625° 83		
636° 0	634° 2	638° 0	638° 2	645° 0	640° 0	633° 1	638° 1	—	—	—	—	—	—	—		
—	—	—	—	—	—	—	—	458° 0	422° 2	518° 5	455° 7	308° 0	110° 8	557° 47		
692° 5	659° 0	660° 0	880° 0	733° 0	605° 0	643° 0	635° 0	634° 8	595° 0	598° 0	605° 0	605° 0	612° 0	553° 42		
625° 5	629° 0	629° 2	634° 8	635° 0	6											

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean (contin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
JANUARY.												
1	622'0	633'5	633'5	634'0	629'2	625'4	622'4	621'7	617'1	619'0	623'6	627'0
2	—	—	—	—	—	—	—	—	—	—	—	—
3	613'8	645'4	644'0	641'9	637'1	627'4	627'0	627'0	623'0	626'0	634'6	627'8
4	610'0	636'0	637'2	631'5	628'0	623'4	622'4	619'4	615'5	615'7	628'2	633'4
5	619'4	650'4	650'4	644'9	631'4	624'4	629'6	633'4	634'2	637'4	644'0	645'8
6	652'3	653'8	656'0	651'0	641'0	634'0	633'5	637'5	640'2	643'8	648'2	650'2
7	662'0	660'0	659'0	671'2	656'8	643'2	634'2	635'6	637'0	644'8	653'0	654'0
8	658'2	656'4	657'8	652'0	642'1	633'8	635'9	630'8	628'8	640'0	649'0	651'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	672'1	670'5	676'0	680'0	650'0	645'0	647'0	650'8	660'5	670'5	677'5	676'0
11	674'0	673'8	673'0	667'5	656'5	642'5	650'0	658'5	663'0	670'0	676'0	682'2
12	625'0	624'5	610'5	626'0	631'5	620'0	620'0	632'7	616'0	613'8	638'0	649'0
13	610'0	630'0	619'0	573'2	622'8	618'2	615'0	617'0	638'0	631'2	646'0	622'0
14	626'6	621'8	620'0	608'0	605'0	600'0	605'9	609'0	613'0	625'0	606'0	630'5
15	629'0	630'0	626'0	625'8	613'9	606'0	607'0	613'5	621'2	626'5	628'0	628'5
16	—	—	—	—	—	—	—	—	—	—	—	—
17	621'0	623'8	625'0	624'0	615'0	610'0	613'0	616'0	617'0	623'5	631'0	632'9
18	610'0	639'0	639'5	637'0	631'0	622'0	621'8	616'8	628'8	636'8	647'0	645'5
19	652'5	652'5	652'0	662'8	641'2	638'0	628'4	636'0	634'2	631'0	645'0	648'0
20	643'3	640'0	646'0	642'0	639'0	627'0	628'5	633'2	638'2	642'0	630'0	641'0
21	612'1	612'9	613'6	610'5	633'0	629'5	625'0	628'5	627'5	629'0	627'5	623'5
22	614'0	612'5	613'8	610'0	640'0	631'8	626'0	628'0	632'0	640'0	652'0	648'8
23	—	—	—	—	—	—	—	—	—	—	—	—
24	631'0	649'0	630'0	625'0	629'0	625'0	628'0	621'8	626'0	639'2	644'0	639'0
25	610'0	639'0	634'0	624'0	613'2	606'2	608'2	614'0	621'0	627'9	612'5	635'0
26	630'0	634'2	632'2	623'9	612'0	611'2	611'0	620'0	621'0	625'0	634'0	637'0
27	627'0	627'0	630'0	625'0	611'0	600'0	597'0	612'0	624'0	631'0	638'0	638'0
28	635'0	638'0	637'4	624'0	616'0	614'0	620'0	627'5	637'2	638'0	649'0	638'8
29	610'0	606'2	616'0	610'0	614'0	605'0	602'0	610'5	616'0	621'2	625'5	625'1
30	—	—	—	—	—	—	—	—	—	—	—	—
31	641'5	640'0	638'9	636'0	627'8	618'8	615'8	620'0	623'9	628'9	632'6	638'0
Hourly Means	640'85	640'78	639'65	635'43	629'52	622'34	622'10	625'82	629'01	633'74	640'39	641'08
TEMPERATURE OF THE BILAR MAGNET.												
JANUARY.												
1	51'5	54'5	54'5	54'6	54'5	54'8	54'9	54'9	54'6	54'6	54'4	54'2
2	—	—	—	—	—	—	—	—	—	—	—	—
3	45'6	45'5	45'4	45'7	46'1	46'1	46'2	46'4	46'2	46'9	47'4	47'5
4	47'5	47'0	46'2	46'6	46'4	47'0	47'0	46'4	46'3	46'4	46'8	46'0
5	42'0	42'0	41'7	41'3	41'3	41'7	42'0	42'5	41'4	45'6	46'5	45'9
6	38'0	37'6	37'5	37'2	37'9	39'0	39'1	39'8	39'8	39'7	39'8	39'1
7	35'9	36'0	36'4	36'4	36'6	37'1	37'6	38'0	37'6	37'3	38'1	37'8
8	39'4	39'5	39'5	39'8	40'3	41'0	41'9	42'9	43'2	43'8	44'0	44'2
9	—	—	—	—	—	—	—	—	—	—	—	—
10	26'9	26'5	25'0	25'2	25'5	26'0	27'0	28'0	28'0	28'8	29'5	29'6
11	25'2	26'5	26'7	26'7	26'7	27'5	28'3	29'7	30'5	31'8	32'5	33'0
12	34'3	34'0	34'3	35'0	36'0	37'0	37'5	39'2	40'1	40'6	41'6	41'6
13	42'4	42'6	42'6	43'0	43'4	43'7	43'8	44'3	44'2	44'6	45'0	45'4
14	47'6	47'7	47'5	47'6	47'9	48'2	48'5	48'6	48'4	49'0	49'4	49'5
15	50'0	50'4	50'1	50'2	49'8	50'2	50'7	51'3	51'6	52'2	52'5	52'4
16	—	—	—	—	—	—	—	—	—	—	—	—
17	43'7	43'5	43'1	43'3	43'3	43'5	43'5	43'8	44'0	44'8	45'4	45'8
18	42'0	42'5	41'5	41'5	41'5	41'4	40'5	40'6	40'9	41'7	41'8	40'5
19	35'1	35'1	35'4	36'2	37'6	37'8	38'1	38'7	38'6	38'9	39'5	39'4
20	43'0	43'1	42'8	42'7	43'5	44'9	45'1	45'6	46'4	47'5	48'4	48'2
21	46'5	46'4	46'4	46'5	47'4	48'4	49'0	49'5	49'5	49'8	49'5	48'6
22	42'2	42'2	41'4	41'2	41'0	41'6	42'0	41'9	41'5	42'5	43'0	44'2
23	—	—	—	—	—	—	—	—	—	—	—	—
24	37'2	37'5	38'0	38'5	39'0	40'5	41'4	41'8	42'8	44'0	44'8	44'5
25	44'0	44'5	44'2	44'6	45'4	45'8	46'3	46'6	46'9	47'8	48'4	48'5
26	49'8	49'4	48'7	48'4	48'0	48'8	49'0	49'2	48'9	49'4	49'4	49'3
27	50'5	50'0	50'0	49'9	50'0	50'6	51'4	51'9	51'9	52'1	52'1	51'6
28	48'8	48'2	48'2	48'3	48'8	49'7	49'5	50'0	49'5	49'5	49'5	49'2
29	46'0	46'0	45'8	46'0	46'4	47'0	47'0	47'4	47'4	47'3	47'8	47'8
30	—	—	—	—	—	—	—	—	—	—	—	—
31	43'7	44'0	44'0	44'6	44'6	45'1	45'2	45'6	45'8	47'1	48'1	48'6
Hourly Means	42'42	42'39	42'18	42'35	42'65	43'25	43'56	44'02	44'19	44'76	45'24	45'08

re, 1° 63.

10 ^h .	11 ^h .
623°6	627°0
634°6	627°8
628°2	633°4
644°0	645°8
648°2	650°2
653°0	654°0
649°0	651°0
677°5	676°0
676°0	682°2
638°0	649°0
646°0	622°0
606°0	630°5
628°0	628°5
631°0	632°9
647°0	645°5
645°0	648°0
630°0	641°0
627°5	623°5
652°0	648°8
644°0	639°0
642°5	635°0
634°0	637°0
638°0	638°0
649°0	638°8
625°5	625°1
632°6	638°0
640°39	641°08

HORIZONTAL FORCE.													Daily and Monthly Means.
One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° C.													
12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .		
Re. Div. 627°2	Re. Div. 630°0	Re. Div. 630°2	Re. Div. 633°9	Re. Div. 634°4	Re. Div. 635°0	Re. Div. 635°9	Re. Div. 641°9	Re. Div. 640°0	Re. Div. 643°9	Re. Div. 642°2	Re. Div. 645°0	Re. Div. 631°58	
634°0	622°0	613°2	621°0	614°0	619°0	625°0	615°4	616°0	616°0	627°4	630°1	627°42	
631°4	636°4	639°4	640°6	641°2	641°2	639°6	642°4	644°4	643°5	647°5	644°8	634°42	
645°2	641°8	643°8	644°1	641°7	641°0	648°4	645°0	646°0	646°4	649°0	654°0	642°70	
650°6	649°1	647°2	647°0	647°0	650°0	649°4	650°8	653°0	653°5	656°0	660°0	648°13	
653°4	650°0	651°4	654°5	652°5	652°0	656°0	653°0	657°5	657°5	658°0	658°4	652°71	
648°1	650°1	651°0	648°0	649°0	649°0	665°0	665°8	668°2	673°2	677°8	677°6	652°44	
674°0	668°0	661°0	673°8	676°0	674°2	675°8	671°2	670°0	672°0	676°0	673°8	668°53	
670°8	669°8	690°2	689°5	703°5	671°0	668°0	669°1	627°6	640°0	648°4	643°0	667°00	
637°2	640°0	639°0	638°0	637°4	633°2	632°8	636°0	635°5	633°0	638°0	642°1	631°22	
621°0	631°0	630°8	637°0	628°0	630°0	628°8	628°0	625°0	628°0	627°0	629°5	625°69	
619°0	615°0	623°0	623°0	628°5	624°0	626°0	627°0	627°8	629°4	624°2	628°8	619°44	
628°0	628°0	630°0	631°0	639°8	634°8	622°5	615°5	617°2	621°2	624°2	618°0	623°57	
632°0	635°2	634°0	633°2	639°0	637°0	634°2	634°8	635°2	635°0	637°2	639°5	627°85	
649°0	638°1	641°0	641°0	641°8	643°0	642°2	644°0	643°0	643°6	653°0	653°0	639°20	
619°0	619°0	615°0	649°2	647°5	650°2	648°0	643°0	639°8	646°8	649°8	646°0	645°20	
640°0	641°3	641°0	637°0	639°0	642°5	653°5	638°2	639°0	641°2	641°0	640°5	639°35	
626°0	628°0	635°0	639°2	638°2	638°0	638°0	639°5	641°0	643°5	645°6	644°0	635°33	
641°8	648°8	647°0	641°9	643°0	635°0	643°8	644°2	645°9	637°8	639°4	641°5	640°80	
640°9	638°0	640°0	644°0	644°2	644°0	640°0	640°8	641°5	641°6	640°5	641°0	636°81	
637°0	635°	636°0	636°8	636°2	635°2	637°8	638°5	640°0	641°0	638°5	632°1	631°22	
635°0	630°0	618°5	630°8	633°0	625°0	624°0	622°8	621°0	629°2	628°8	628°8	625°89	
629°0	631°5	636°0	636°0	637°8	627°4	617°2	616°4	615°4	626°5	620°2	631°0	624°47	
627°0	618°5	660°0	613°0	615°5	572°0	560°0	594°0	532°0	533°5	537°0	560°5	609°50	
624°3	624°5	625°2	626°5	627°2	627°0	620°5	627°0	625°6	645°0	644°0	642°0	621°68	
638°8	638°0	638°2	610°4	645°3	642°5	642°2	644°0	645°0	641°0	642°5	643°2	635°57	
638°95	640°40	640°50	640°36	641°33	637°43	637°48	638°01	634°45	637°05	638°98	640°32	636°08	
TEMPERATURE OF THE BIPOLAR MAGNET.													
51°2	53°8	53°4	53°4	53°3	53°3	45°5	45°5	45°5	46°0	46°1	46°2	52°13	
47°6	47°7	47°5	47°5	47°6	48°0	48°0	48°0	48°4	48°6	48°8	48°5	47°13	
45°0	44°6	44°5	43°8	43°5	43°0	42°3	42°0	41°8	41°8	42°0	42°0	44°83	
45°0	43°9	42°8	41°5	40°7	40°2	40°2	40°0	40°0	39°7	39°5	38°8	42°05	
39°0	38°1	37°1	36°9	36°7	36°5	36°4	36°0	35°0	34°4	35°4	35°5	37°55	
38°2	37°8	37°7	37°0	35°8	36°0	37°0	37°4	38°4	39°0	39°0	39°2	37°39	
44°5	44°7	44°5	44°0	43°6	43°0	28°6	28°3	27°8	28°0	28°0	27°7	38°84	
29°7	29°5	29°0	28°8	28°4	28°6	28°7	27°4	25°7	25°6	24°8	24°7	27°37	
33°6	34°5	35°1	35°1	35°1	35°1	35°0	34°8	35°0	35°0	35°2	34°6	31°80	
41°5	40°7	40°0	29°6	39°4	38°8	38°5	38°9	39°9	40°5	41°0	41°6	38°82	
46°0	45°6	45°4	45°5	46°0	46°0	46°1	46°5	46°7	47°5	47°5	47°6	45°06	
50°0	49°5	49°5	49°5	49°8	50°0	50°0	50°2	50°6	50°7	50°2	49°8	49°15	
52°4	51°9	51°6	51°4	51°0	50°2	44°0	43°8	43°7	44°0	44°0	43°8	49°29	
45°6	41°8	41°6	44°2	44°0	43°9	43°5	43°2	42°2	42°0	42°0	42°4	43°75	
40°1	38°8	38°0	37°0	36°4	36°4	36°1	35°7	35°5	35°7	35°5	35°4	39°08	
39°2	39°4	38°9	38°5	38°6	39°0	39°5	40°0	41°4	41°6	41°6	42°5	38°78	
48°2	48°2	48°2	47°9	48°0	47°6	47°6	47°7	47°6	47°8	47°6	47°0	46°44	
49°5	47°1	46°5	46°2	45°6	45°0	44°1	43°4	43°2	43°2	43°0	42°7	46°50	
44°6	43°8	43°6	43°0	42°5	41°7	36°0	36°0	35°7	36°0	36°0	36°6	40°89	
44°6	44°2	43°6	43°4	43°4	43°4	43°0	42°5	42°5	43°0	43°3	43°7	42°11	
48°7	48°4	48°2	48°3	48°3	48°4	48°3	48°4	48°9	49°0	49°4	49°6	47°37	
49°8	49°8	50°5	50°9	51°0	51°0	51°0	51°0	51°0	51°0	50°9	50°5	49°86	
52°4	52°0	51°7	51°4	51°2	50°4	50°2	50°0	49°6	49°5	49°1	49°0	50°77	
49°4	49°3	49°4	49°4	49°2	47°8	47°2	46°8	46°5	46°3	46°1	46°0	48°44	
47°5	47°2	47°0	46°6	46°2	46°0	41°3	41°3	41°6	41°6	42°3	42°5	45°54	
48°8	47°0	46°2	45°2	44°5	44°0	43°8	43°7	43°5	43°5	43°3	43°1	45°12	
45°16	44°70	44°40	44°08	43°84	43°59	42°00	41°87	41°83	41°96	41°99	41°96	43°31	

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 65.												
Mean (altim.) gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
FEBRUARY.												
1	646'9	647'3	646'5	640'0	636'0	628'5	624'2	621'0	631'0	633'0	638'0	641'0
2	657'8	646'1	650'4	650'0	636'4	628'8	622'0	628'0	639'0	643'5	648'5	648'5
3	650'0	650'0	650'8	641'5	631'5	622'0	623'0	626'0	628'0	634'0	640'0	641'0
4	648'2	646'0	645'5	639'3	631'5	622'4	621'0	619'8	626'8	634'2	638'8	643'2
5	648'1	647'4	646'0	643'4	633'8	630'2	631'9	635'0	637'8	638'6	643'0	645'0
6	—	—	—	—	—	—	—	—	—	—	—	—
7	656'0	652'2	649'2	643'2	635'0	632'0	637'0	643'0	639'2	638'8	650'0	659'0
8	641'2	641'0	635'5	641'5	629'0	613'0	598'0	633'5	643'0	642'8	647'5	652'0
9	645'0	641'2	640'4	634'0	621'5	605'0	623'0	623'0	652'5	625'0	643'0	632'4
10	647'0	648'1	648'0	648'0	636'0	634'0	627'0	613'0	629'2	638'2	641'8	645'0
11	660'0	653'5	661'0	663'8	665'0	645'4	641'8	642'1	650'0	654'0	655'1	656'2
12	661'0	661'5	658'2	657'4	659'0	648'0	640'0	636'0	638'8	643'0	646'2	655'0
13	—	—	—	—	—	—	—	—	—	—	—	—
14	660'2	661'0	658'1	652'0	646'0	648'0	649'0	655'0	658'0	653'0	652'0	641'0
15	650'0	648'2	636'0	646'0	642'5	638'0	628'0	628'0	640'0	642'0	638'0	641'0
16	647'3	646'0	646'2	641'0	631'0	624'0	626'0	630'6	635'4	634'0	636'9	640'0
17	646'0	647'0	646'0	639'0	636'0	628'2	627'8	629'0	638'0	642'0	643'5	645'0
18	648'2	646'8	641'2	638'0	626'0	620'0	622'0	628'0	638'0	638'5	642'0	645'0
19	643'0	641'2	636'0	625'0	628'5	635'0	635'0	639'0	641'0	638'6	639'0	637'0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	581'0	320'0	506'0	638'8	616'5	588'5	618'5	617'0	569'3	608'3	729'5	736'9
22	597'5	595'0	586'0	591'5	592'5	588'2	601'5	595'0	570'0	642'0	609'8	613'0
23	616'0	618'0	613'0	615'0	610'5	601'2	572'5	614'0	624'2	613'0	624'0	614'0
24	565'8	553'6	545'2	578'0	601'7	600'5	610'6	612'0	612'0	623'0	626'0	619'0
25	636'8	588'0	621'6	639'0	612'4	613'0	617'5	614'0	624'0	623'5	634'0	631'0
26	645'5	647'0	643'0	639'5	630'0	624'0	611'3	614'0	618'0	623'0	627'5	632'8
27	—	—	—	—	—	—	—	—	—	—	—	—
28	653'0	642'0	648'0	640'0	630'5	621'8	616'4	628'2	598'0	621'8	635'0	635'2
29	645'0	645'0	643'0	638'8	636'0	628'2	620'6	622'8	625'2	628'2	636'0	640'0
Hourly Means	644'39	639'92	639'51	638'85	632'43	625'70	622'85	627'74	633'35	635'03	640'25	640'81
TEMPERATURE OF THE BIPOLAR MAGNET.												
	°	°	°	°	°	°	°	°	°	°	°	°
FEBRUARY.												
1	43'2	42'7	42'1	41'6	41'7	42'0	42'4	42'4	43'0	43'6	44'2	44'0
2	41'8	41'8	41'4	41'8	42'7	43'5	44'0	44'7	45'0	47'0	48'1	48'5
3	46'3	46'0	45'5	46'3	47'2	47'8	48'3	49'0	49'2	50'1	51'1	51'3
4	44'8	44'5	44'7	45'0	46'4	47'3	47'6	48'0	48'0	48'4	48'4	48'6
5	46'0	46'2	46'0	45'4	46'2	46'8	46'8	46'0	45'5	45'5	45'2	43'9
6	—	—	—	—	—	—	—	—	—	—	—	—
7	39'0	38'4	37'8	37'0	37'0	37'4	37'8	38'4	39'2	40'5	41'0	42'7
8	39'4	39'0	38'4	37'6	38'0	39'0	40'1	41'3	41'5	42'6	43'0	43'2
9	41'5	41'4	41'6	42'5	42'5	42'3	41'8	42'5	43'0	43'0	44'0	43'5
10	40'5	40'5	40'0	39'4	39'4	39'4	39'4	39'4	39'6	39'8	40'3	39'8
11	32'0	31'5	32'0	33'0	33'9	34'4	34'4	34'9	35'7	35'9	38'4	38'8
12	36'1	36'0	35'2	34'9	35'9	37'0	37'2	38'5	39'7	41'0	41'8	42'6
13	—	—	—	—	—	—	—	—	—	—	—	—
14	38'7	38'5	38'5	40'2	41'4	42'2	42'8	43'7	44'6	45'3	45'5	45'4
15	43'0	42'4	42'0	42'3	42'7	42'8	43'0	43'7	44'7	46'0	47'5	48'0
16	42'8	42'5	42'9	44'5	46'0	47'0	47'5	48'4	48'6	49'2	49'9	49'6
17	44'0	43'4	44'0	45'0	46'0	47'0	47'6	48'4	48'4	49'5	50'3	50'9
18	45'6	45'6	45'6	46'5	47'0	48'0	48'5	49'8	50'4	50'7	51'0	51'3
19	46'0	45'5	45'1	45'2	46'0	46'8	48'0	48'6	48'8	48'7	50'3	50'0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	45'2	45'2	45'2	46'3	46'9	47'9	48'2	47'5	49'5	51'0	51'5	52'4
22	49'8	49'8	49'2	49'0	49'0	49'5	49'9	50'2	50'4	50'5	50'8	50'5
23	49'4	49'0	49'3	49'2	49'6	49'6	49'2	48'7	48'5	49'0	49'0	49'0
24	45'2	44'3	44'0	44'0	43'7	44'2	44'5	45'3	46'0	46'4	46'4	46'6
25	42'0	40'4	40'7	41'0	42'0	42'9	43'3	43'6	43'4	43'8	45'0	45'2
26	43'3	42'7	43'5	45'2	46'1	46'1	45'9	46'0	46'3	46'7	47'6	47'4
27	—	—	—	—	—	—	—	—	—	—	—	—
28	42'8	42'0	41'8	41'5	42'3	43'1	44'5	45'1	45'8	46'3	46'8	46'5
29	44'5	44'4	44'0	44'4	45'0	45'4	45'4	45'3	44'9	44'9	44'5	44'2
Hourly Means	42'52	42'12	42'02	42'33	42'99	43'57	43'91	44'39	44'77	45'39	46'06	46'13

* Three minutes late.

re, 1' 63.

10%, 11%.

Se. Div. Se. Div.

638'0 641'0

648'5 648'5

640'0 641'0

638'8 643'2

643'0 645'0

650'0 659'0

647'5 652'0

643'0 642'4

641'8 645'0

655'1 656'2

646'2 655'0

652'0 641'0

638'0 641'0

636'9 640'0

643'5 645'0

642'0 645'0

639'0 637'0

729'5 736'9

609'8 613'0

624'0 614'0

626'0 619'0

634'0 631'0

627'5 632'8

633'0 635'2

636'0 640'0

610'25 640'81

41'2 44'0

48'1 48'5

51'1 51'3

48'4 48'6

45'2 43'9

41'0 42'7

43'0 43'2

44'0 43'5

40'3 39'8

38'4 38'8

41'8 42'6

45'5 45'4

47'5 48'0

49'9 49'6

50'3 50'9

51'0 51'3

50'3 50'0

51'5 52'4

50'8 50'5

49'0 49'0

46'4 46'6

45'0 45'2

47'6 47'4

46'8 46'5

44'5 44'2

46'06 46'13

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
646'2	647'0	647'4	646'5	648'0	646'0	647'0	645'5	646'8	648'4	646'8	651'0	641'79
644'0	642'0	641'3	642'8	644'2	645'0	647'2	646'0	647'0	645'6	648'0	647'4	643'31
641'4	641'2	642'4	629'3	624'0	630'0	635'1	632'0	640'2	644'8	645'0	649'0	637'18
642'9	642'8	642'8	643'0	642'0	641'8	643'4	646'7	647'7	650'0	647'5	649'0	639'85
648'0	647'0	647'2	650'0	650'9	651'2	—	—	—	—	—	—	640'20
—	—	—	—	—	—	623'0	610'0	638'0	628'0	638'0	653'2	642'25
629'0	645'5	645'0	634'0	638'0	638'5	636'0	641'2	642'8	643'2	644'8	641'4	642'25
642'0	640'8	631'5	642'0	631'2	627'8	626'0	632'0	640'2	629'0	628'1	630'2	634'24
633'8	637'8	633'8	637'7	640'0	642'0	640'0	641'4	648'0	645'8	647'0	648'0	636'72
647'0	643'8	644'2	652'0	653'0	655'0	658'0	657'0	656'7	657'7	658'5	658'5	645'61
660'0	661'0	661'8	663'0	663'0	660'0	663'0	662'0	662'0	662'0	662'0	662'2	637'91
652'2	653'0	654'0	653'0	658'0	657'0	—	—	—	—	—	—	653'65
—	—	—	—	—	—	635'0	639'8	660'0	661'4	660'0	660'0	645'58
643'0	652'0	648'2	646'8	635'2	634'8	630'0	627'7	619'0	641'0	642'0	640'8	640'12
640'2	644'0	642'2	640'8	640'6	637'0	638'9	638'7	638'0	638'2	641'0	645'5	640'12
641'0	644'2	644'1	643'3	643'0	638'5	639'0	645'0	647'3	646'2	646'3	647'1	640'14
642'0	642'2	643'8	643'0	643'5	644'0	647'1	643'1	644'0	645'0	647'0	648'4	641'69
645'6	646'8	647'5	649'0	645'0	646'5	640'0	638'8	635'2	642'8	638'0	648'0	639'87
639'0	645'0	636'2	636'0	633'8	636'6	—	—	—	—	—	—	626'79
—	—	—	—	—	—	610'0	617'1	563'0	600'0	594'1	593'9	599'07
577'2	594'0	607'5	573'6	631'4	610'2	638'2	617'0	590'0	586'2	589'0	570'5	599'36
605'0	605'0	602'0	609'1	607'8	641'0	620'2	525'1	594'0	585'0	602'5	606'0	607'06
622'0	618'0	641'0	617'5	623'5	628'5	630'0	599'0	543'0	585'0	596'0	530'5	590'93
621'0	622'0	616'0	627'5	623'0	614'0	612'0	540'5	501'2	536'4	480'7	640'7	627'15
619'0	632'0	636'2	626'2	631'4	634'2	636'3	633'1	635'0	636'0	637'5	640'0	635'12
636'2	638'8	633'4	645'1	626'0	636'7	—	—	—	—	—	—	635'10
—	—	—	—	—	—	642'0	640'9	647'0	645'4	645'0	650'8	639'90
633'0	635'2	638'9	640'0	637'0	639'0	641'0	640'5	640'0	638'6	641'2	648'0	—
641'4	646'8	644'8	644'0	645'5	647'0	643'0	645'0	645'0	646'0	649'0	651'2	—
639'56	642'13	641'90	641'41	639'99	640'40	638'39	634'04	629'87	635'50	634'07	640'64	636'62

TEMPERATURE OF THE DIAPHRAGM.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
44'0	43'7	43'6	43'9	43'9	43'9	43'7	43'6	43'4	43'3	43'0	42'0	43'12
48'5	47'5	47'5	47'5	47'0	46'4	46'3	46'2	46'3	46'3	46'3	46'4	45'52
51'1	51'3	51'4	50'5	49'7	47'5	47'4	45'7	45'9	45'5	45'4	45'2	41'99
48'4	48'6	49'0	48'7	48'4	48'2	47'4	47'0	46'8	46'3	46'1	46'0	46'98
45'2	43'9	43'7	42'9	42'6	42'5	42'0	41'8	—	—	—	—	42'97
—	—	—	—	—	—	37'0	37'2	37'5	37'7	38'0	38'8	40'05
41'0	42'7	42'7	42'5	42'5	41'6	41'0	40'6	40'4	40'2	40'2	40'2	41'72
43'0	43'2	43'5	43'3	43'4	43'6	43'8	43'5	43'2	43'1	43'0	42'5	42'76
40'3	39'8	43'7	43'6	43'6	43'6	43'4	43'4	43'0	42'7	42'6	42'4	37'70
38'4	38'8	39'5	38'7	37'8	37'0	36'0	35'1	34'9	33'5	32'5	32'8	33'65
41'8	42'6	38'5	38'5	37'4	37'0	36'9	36'5	36'0	36'0	35'7	35'7	38'80
—	—	42'5	42'6	42'5	42'0	41'6	41'5	—	—	—	—	43'88
45'5	45'4	—	—	—	—	36'0	36'4	36'6	36'9	37'8	38'8	41'55
47'5	48'0	46'0	46'0	46'1	46'0	45'8	45'6	45'5	45'1	44'5	44'0	46'25
49'9	49'6	48'0	47'6	46'6	46'0	45'4	44'7	44'2	44'0	43'8	43'0	47'68
50'3	50'9	49'0	48'6	47'8	46'8	46'6	45'5	45'0	44'7	44'2	43'8	48'55
51'0	51'3	50'6	50'8	50'4	49'5	49'5	48'5	47'4	46'5	46'3	46'0	47'21
50'3	50'0	51'0	50'3	50'3	49'8	49'5	48'5	48'2	47'6	47'4	47'1	49'74
—	—	50'1	50'0	49'9	49'5	48'8	48'6	—	—	—	—	49'47
51'5	52'4	—	—	—	—	44'5	44'5	44'5	44'7	44'6	44'4	48'01
50'8	50'5	52'5	52'4	52'4	51'8	51'7	51'5	51'4	51'1	50'9	50'0	44'74
49'0	49'0	60'0	60'0	49'6	49'2	48'8	48'8	48'3	48'6	48'6	48'8	44'05
46'4	46'6	49'0	48'0	47'6	47'7	47'0	46'8	46'6	46'3	46'0	45'6	45'03
45'0	45'2	46'2	45'3	45'0	44'5	44'0	44'0	44'3	44'5	44'2	44'0	44'51
47'6	47'4	45'0	45'5	46'6	46'6	46'3	45'5	45'7	45'6	44'2	43'8	43'75
—	—	47'0	46'7	46'4	45'9	45'4	44'8	—	—	—	—	—
46'8	46'5	—	—	—	—	43'0	42'8	42'9	42'7	43'2	43'0	—
44'5	44'2	46'5	46'5	46'5	46'4	46'5	46'5	46'1	45'1	44'5	44'5	—
—	—	44'0	43'4	43'1	42'6	42'5	42'6	42'8	42'5	42'5	42'5	—
46'06	46'13	46'06	45'70	45'45	45'11	44'75	44'40	43'47	43'28	43'03	42'80	43'98

HORIZONTAL FORCE.												
One Scale Division = .00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Guttin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	1 651'0	649'2	644'0	634'0	637'5	633'0	631'1	634'0	637'8	638'0	640'0	641'0
	2 650'1	647'0	643'1	639'0	635'0	627'2	626'0	632'2	637'5	641'0	646'0	650'0
	3 655'0	655'4	647'0	640'0	633'0	625'5	625'8	631'6	640'0	647'0	650'5	651'2
	4 654'2	656'0	652'0	648'0	638'8	630'2	628'0	630'5	640'0	647'0	648'8	650'0
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 658'0	658'0	654'0	646'5	634'8	632'8	635'0	640'5	661'3	651'7	643'8	651'0
	7 648'5	644'8	639'2	635'6	629'0	624'8	623'9	635'0	637'6	641'0	638'0	643'8
	8 639'8	632'4	637'8	629'0	616'0	597'2	608'5	620'0	626'0	621'0	636'0	627'5
	9 638'0	635'0	631'0	625'0	621'0	615'0	614'4	617'8	625'0	632'0	637'0	640'2
	10 649'0	644'0	644'0	640'0	632'0	618'0	620'2	628'2	635'5	639'2	643'0	644'7
	11 652'0	652'0	647'5	639'2	630'8	621'2	616'4	619'4	623'8	634'4	641'8	644'2
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 648'8	649'2	641'4	634'0	629'0	626'8	623'4	632'0	640'0	641'5	646'5	648'0
	14 657'0	651'8	655'1	651'4	648'0	646'4	645'0	648'0	645'0	650'8	644'2	649'0
	15 658'0	655'0	643'0	621'0	613'5	642'3	631'0	632'5	658'0	655'0	651'7	640'2
	16 672'0	667'0	660'5	645'0	636'5	637'5	629'5	642'0	635'5	642'2	652'2	656'6
	17 607'0	617'0	607'0	596'8	587'5	607'8	626'4	629'3	653'0	657'1	648'4	648'0
	18 633'3	631'2	634'0	632'9	629'6	621'4	621'8	633'0	632'2	643'0	627'0	636'5
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 589'0	580'2	553'0	561'0	576'0	558'8	592'0	625'0	663'0	696'0	664'6	657'0
	21 616'0	612'0	614'0	611'4	602'0	603'0	603'0	613'0	608'5	618'0	619'0	617'4
	22 632'5	633'0	630'5	622'0	614'0	609'0	602'0	605'8	619'8	628'2	633'0	638'8
	23 635'5	631'4	626'8	623'0	613'0	610'0	609'6	612'6	619'0	615'8	629'2	633'0
	24 622'4	629'8	639'4	633'5	626'0	616'1	608'1	613'0	617'8	618'8	641'0	633'5
	25 633'7	632'0	603'0	597'0	596'0	618'0	608'5	618'0	616'0	619'0	622'0	628'5
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 640'6	641'0	625'0	615'0	608'5	608'8	612'6	608'5	620'8	631'9	626'0	640'2
	28 642'0	639'0	635'8	629'0	623'0	613'5	613'5	623'8	638'0	626'0	637'4	637'6
	29 637'2	632'0	627'2	619'4	613'8	609'2	613'4	615'9	623'1	628'9	634'1	632'4
	30 635'4	634'2	633'8	627'9	617'1	610'7	612'0	620'0	628'8	644'0	645'0	635'0
	31 614'7	611'3	605'0	614'7	610'0	593'0	593'5	612'0	618'0	624'0	643'8	632'0
Hourly Means	639'66	637'81	632'37	626'34	621'53	617'19	617'72	625'39	633'10	638'10	640'23	640'95
TEMPERATURE OF THE BILAR MAGNET.												
MARCH.	1 42'2	41'4	42'2	42'7	43'3	41'3	45'3	45'7	45'9	45'6	45'8	45'7
	2 41'0	40'0	39'0	38'5	38'9	39'6	40'2	41'7	41'7	42'3	42'4	41'9
	3 39'8	39'8	39'2	39'0	39'7	41'3	42'2	43'0	44'0	45'0	45'0	45'3
	4 40'5	40'0	40'3	42'0	44'7	41'5	44'9	44'8	44'0	43'6	43'0	42'0
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 38'4	38'5	39'0	39'7	40'4	41'2	41'6	42'2	43'2	44'6	46'0	46'2
	7 41'4	44'2	44'2	44'4	44'6	45'0	46'0	46'7	48'1	49'4	49'8	50'0
	8 48'6	48'2	48'6	48'6	49'0	50'0	51'0	51'7	51'9	52'5	53'2	52'5
	9 46'3	45'7	45'5	45'3	45'7	46'3	46'9	47'2	48'4	49'4	50'0	49'4
	10 42'0	41'5	41'5	42'4	44'0	45'0	45'7	45'8	47'0	48'2	49'2	49'2
	11 44'2	44'0	45'5	46'8	47'4	48'3	48'4	48'4	48'8	49'3	50'0	49'4
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 45'2	44'2	43'6	43'6	43'6	44'1	44'1	43'8	44'0	44'3	44'6	44'7
	14 40'8	40'1	40'1	40'8	40'8	41'0	41'0	41'5	41'6	41'7	41'9	41'9
	15 34'0	34'0	34'4	35'2	35'6	35'8	36'0	36'4	37'2	38'1	38'7	39'2
	16 34'5	34'7	35'7	36'4	37'0	38'0	39'0	39'4	40'2	40'6	41'6	41'7
	17 41'0	41'5	41'6	41'6	41'5	42'4	42'8	43'1	43'7	44'1	44'6	45'5
	18 41'4	41'5	41'6	43'7	45'0	46'3	46'6	47'0	47'4	47'4	47'5	47'5
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 44'8	44'4	44'4	44'0	44'5	45'7	46'0	46'3	46'2	47'3	47'3	47'2
	21 49'2	49'0	50'0	51'6	52'5	53'2	53'5	54'1	54'5	55'5	56'3	56'6
	22 48'8	48'8	49'2	49'5	49'8	50'5	51'0	51'2	51'3	51'4	51'6	51'9
	23 53'6	52'8	52'0	51'5	52'1	52'7	52'9	53'0	52'5	52'6	53'6	53'8
	24 47'6	48'4	49'3	50'0	50'5	51'2	51'5	52'0	52'5	53'4	55'0	54'0
	25 51'0	50'8	50'1	51'0	51'0	51'3	51'4	51'9	52'0	52'8	53'3	53'3
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 47'2	47'0	47'0	47'3	47'9	49'0	50'3	51'3	51'6	52'2	52'5	52'2
	28 47'2	47'5	48'0	48'5	49'9	51'0	51'9	52'1	52'4	53'0	53'8	54'4
	29 52'3	52'8	53'8	54'8	55'2	55'6	55'6	55'6	56'6	57'6	58'8	60'4
	30 52'2	52'6	53'0	54'0	54'5	54'7	54'7	55'0	55'0	55'4	55'4	55'5
	31 52'9	52'0	52'2	52'5	53'5	54'5	55'6	56'4	56'1	57'2	58'0	58'3
Hourly Means	44'86	44'64	44'85	45'39	46'02	46'76	47'26	47'68	48'07	48'69	49'22	49'23

ure, 1° 63.

10h.	11h.
Sc. Div.	Sc. Div.
640'0	641'0
640'0	650'0
650'5	651'2
648'8	650'0
643'8	651'0
638'0	643'8
636'0	627'5
637'0	640'2
639'2	643'0
641'8	644'2
646'5	648'0
644'2	649'0
651'7	640'2
652'2	656'6
648'4	648'0
627'0	636'5
661'6	657'0
619'0	617'4
633'0	638'8
629'2	633'0
641'0	633'5
622'0	628'5
626'0	640'2
637'4	637'6
634'1	632'4
645'0	635'0
643'8	632'0
640'23	640'95

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
644'0	643'5	645'6	618'0	646'8	615'0	646'0	647'4	647'8	648'0	—	618'2	642'65
651'0	654'0	652'0	652'0	653'0	653'8	651'0	655'0	654'7	654'6	656'0	655'8	646'67
650'5	651'2	649'0	618'8	651'8	652'9	653'1	651'8	657'3	656'0	655'0	654'0	646'84
652'3	657'1	656'8	656'6	657'0	657'2	—	—	—	—	—	—	651'07
—	—	—	—	—	—	659'0	658'0	663'0	663'0	661'6	660'6	—
643'8	651'0	646'2	641'0	642'0	642'4	645'5	640'5	644'0	645'0	645'0	647'2	645'80
637'6	643'0	646'0	643'0	641'5	642'0	641'0	638'4	637'2	638'0	637'2	636'0	638'55
636'0	627'5	631'0	642'0	626'0	630'0	627'8	628'8	623'2	634'1	634'6	633'7	628'22
637'0	640'2	641'8	638'4	640'0	641'2	643'0	643'0	645'1	646'0	645'8	646'2	635'63
639'2	643'0	641'7	645'8	647'3	647'8	647'0	648'4	651'0	652'0	650'0	651'2	641'76
641'8	644'2	646'0	645'0	645'0	646'5	645'5	646'0	—	—	—	—	641'46
—	—	—	—	—	—	—	—	—	—	—	—	—
646'5	648'0	650'6	651'0	652'0	653'0	651'5	652'0	655'0	655'0	657'4	659'5	646'37
644'2	649'0	658'8	651'0	659'0	660'6	665'0	659'5	621'8	618'7	635'0	653'2	619'93
651'7	640'2	645'0	653'0	651'8	653'8	651'2	650'2	654'0	643'8	659'0	657'4	650'23
652'2	656'6	655'4	658'2	647'2	642'8	643'4	610'0	606'4	611'0	608'5	626'5	636'93
648'4	648'0	650'2	645'4	631'0	636'5	635'0	635'0	636'2	636'8	638'0	639'0	630'80
627'0	636'5	641'0	620'8	630'0	631'0	630'0	632'0	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
661'6	657'0	610'0	617'0	617'0	620'2	591'0	598'2	588'4	570'0	583'6	583'6	621'55
619'0	617'4	608'8	616'4	620'8	622'8	623'5	623'7	625'5	626'2	630'0	631'8	607'63
633'0	638'8	625'0	622'4	617'0	621'8	628'0	625'0	633'6	630'3	632'0	633'0	617'82
629'2	633'0	629'0	634'0	628'5	621'5	632'0	634'0	634'8	631'0	633'5	630'8	625'11
641'0	633'5	633'0	630'0	626'5	625'0	620'0	587'5	611'0	630'5	631'2	629'5	623'91
622'0	628'5	614'0	619'5	622'5	616'8	622'2	621'0	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
626'0	640'2	622'4	633'2	637'4	636'2	637'1	643'8	634'0	632'8	630'0	642'5	629'66
637'4	637'6	638'3	633'5	637'1	626'5	628'0	632'0	630'8	633'0	639'5	635'4	632'13
634'1	632'4	630'0	630'0	633'0	625'0	629'8	630'2	641'7	634'0	634'0	633'0	627'66
645'0	635'0	635'0	626'0	622'0	628'5	633'0	630'0	632'8	618'8	609'0	617'5	625'26
643'8	632'0	641'5	626'0	622'0	600'0	602'3	605'2	611'0	615'0	622'0	612'1	614'45
640'23	640'95	638'62	637'97	637'36	636'63	636'46	634'42	633'84	631'28	634'60	636'67	633'50

TEMPERATURE OF THE DIAPHRAGM.

45'8	45'7	45'4	44'7	44'5	44'3	44'0	44'0	44'0	43'2	43'3	43'3	—	42'5	44'06
42'4	41'9	42'0	42'4	42'0	41'6	41'2	41'0	40'0	40'0	39'6	40'0	40'0	39'8	40'70
45'0	45'3	44'6	44'2	42'6	42'1	41'6	41'2	40'8	40'4	41'0	41'2	41'4	41'0	41'85
43'0	42'0	41'2	40'4	40'1	40'0	39'8	39'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
46'0	46'2	46'2	45'2	44'4	44'0	44'0	44'0	43'9	43'5	43'8	43'5	44'4	44'6	43'02
49'8	50'0	49'8	49'5	49'0	49'0	49'0	49'0	49'2	49'2	49'0	48'8	48'9	48'7	47'75
53'2	52'5	52'0	51'5	51'1	51'0	50'4	50'0	49'5	49'5	48'7	47'6	47'1	46'6	50'03
50'0	49'4	48'6	47'6	46'6	46'2	46'0	45'5	45'1	44'9	44'8	44'8	44'0	43'0	46'38
49'2	49'2	49'1	47'5	46'5	45'2	44'7	43'6	43'0	44'0	44'5	44'6	44'6	44'5	45'14
50'0	49'4	49'1	48'5	48'2	47'5	47'5	47'4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
44'6	44'7	44'7	44'0	43'6	43'4	42'7	42'0	42'0	42'2	42'1	41'6	41'3	41'3	43'36
41'9	41'9	40'5	39'0	38'0	36'8	36'2	36'3	36'6	37'0	36'5	35'5	34'7	34'2	38'94
38'7	39'2	39'4	38'4	37'6	36'5	35'6	34'6	34'6	34'3	34'2	34'1	34'4	34'1	35'93
41'6	41'7	40'5	39'5	39'2	39'0	39'0	38'8	38'7	39'3	39'5	40'5	41'7	41'5	39'00
44'6	45'5	45'6	44'6	44'4	43'4	43'4	43'4	42'7	42'0	41'5	42'0	42'0	41'9	42'93
47'5	47'5	48'0	47'9	48'3	48'3	48'2	48'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
47'3	47'2	48'2	48'4	48'6	48'6	48'6	48'8	49'0	49'1	49'0	49'0	49'0	49'0	47'22
56'3	56'6	56'1	55'4	54'4	53'2	52'5	52'0	51'5	51'0	50'3	50'0	49'3	49'3	52'58
51'6	51'9	51'6	51'1	50'6	50'5	50'5	50'6	50'7	51'5	52'4	52'9	53'1	53'5	51'00
53'6	53'8	54'0	53'4	52'9	52'1	51'6	51'3	51'0	50'4	50'0	49'5	49'1	48'8	51'97
55'0	54'0	54'3	53'6	53'2	52'5	52'5	53'0	53'0	52'5	52'0	51'5	51'5	51'2	51'92
53'3	53'3	53'5	53'5	53'5	53'6	53'6	53'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
52'5	52'2	52'3	51'5	50'6	50'3	50'0	49'6	49'2	48'8	48'4	48'0	47'7	48'0	49'38
53'8	54'4	54'4	53'8	53'3	52'8	52'5	52'4	52'2	51'8	51'7	51'9	52'0	52'3	51'70
58'8	60'0	60'4	59'6	58'6	56'8	56'0	55'2	54'8	54'4	54'4	54'0	53'0	52'6	53'77
55'4	55'5	55'7	54'8	54'5	54'4	54'4	53'9	53'5	53'4	53'2	53'0	53'1	53'0	54'12
58'0	58'3	58'5	58'4	58'0	57'6	57'6	57'2	56'3	55'3	54'0	53'5	53'3	53'0	55'60
49'22	49'23	49'11	48'42	47'94	47'43	47'15	46'88	46'07	45'94	45'81	45'78	45'83	45'56	46'86

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Guttin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
APRIL.	Sc. Div. 630'0	Sc. Div. 620'0	Sc. Div. 619'0	Sc. Div. 614'5	Sc. Div. 613'0	Sc. Div. 612'0	Sc. Div. 617'5	Sc. Div. 623'8	Sc. Div. 629'8	Sc. Div. 633'0	Sc. Div. 635'2	Sc. Div. 635'2
1												
2												
3	605'0	618'0	611'0	588'5	594'0	592'0	602'5	621'4	620'8	632'8	665'4	634'0
4	623'0	614'0	617'5	610'2	597'8	593'5	603'2	606'8	618'8	626'6	626'4	628'0
5	631'8	625'0	623'2	616'9	608'2	601'6	598'9	601'8	615'0	635'0	625'0	640'0
6	624'3	627'2	610'0	600'5	601'0	598'0	594'0	595'0	613'0	620'0	628'5	633'0
7	598'0	575'0	568'0	562'0	581'5	585'6	579'5	575'0	606'0	621'5	640'0	631'2
8	621'0	619'0	618'0	611'0	607'0	607'0	607'8	606'8	610'4	621'8	619'8	620'0
9												
10	628'0	630'5	627'0	618'0	608'4	598'2	596'2	601'0	605'0	610'6	617'3	621'0
11	625'8	620'0	621'2	617'0	612'5	604'5	610'0	608'0	620'0	624'5	625'5	623'0
12	627'6	631'2	622'4	623'2	619'0	624'0	623'3	627'0	621'8	626'0	625'0	624'8
13	631'0	630'8	627'0	618'0	615'8	615'6	615'0	618'0	624'0	634'0	636'7	638'2
14	643'0	642'0	635'2	627'9	621'0	619'0	620'2	623'0	626'8	633'8	638'8	639'2
15	645'2	639'3	624'0	626'5	617'2	613'8	618'4	621'0	637'8	640'2	637'0	639'0
16												
17	625'4	628'0	626'6	618'0	613'4	610'6	618'4	621'0	624'0	638'5	640'0	652'0
18	630'0	627'5	619'2	616'0	609'0	612'0	622'0	627'0	633'0	635'2	628'0	635'0
19	636'0	640'0	635'0	631'0	624'0	621'3	626'8	630'0	641'0	641'0	642'4	645'0
20	643'0	641'5	638'2	630'0	623'5	618'0	624'0	622'0	628'0	634'0	639'2	633'8
21 a												
22	626'2	624'0	603'0	603'0	603'0	611'5	608'0	612'5	613'5	614'0	624'0	621'0
23												
24	639'0	638'8	635'0	628'0	621'0	615'0	626'0	629'0	634'8	636'0	634'0	638'0
25	643'0	642'0	629'0	621'0	617'0	625'0	629'0	630'0	635'2	637'8	637'8	637'9
26	644'0	640'0	630'0	618'2	611'2	613'8	620'4	629'0	634'0	637'0	637'3	638'0
27	646'4	646'0	638'2	629'1	626'8	631'0	636'0	639'0	641'0	641'5	643'0	642'0
28	644'0	642'0	635'8	628'0	626'5	632'1	638'2	647'0	648'5	652'0	654'0	646'5
29	621'5	620'8	630'0	621'8	589'0	589'0	618'0	637'5	619'0	639'2	637'5	640'2
30												
Hourly Means	630'78	628'50	623'20	616'43	611'30	610'70	615'62	619'90	625'37	632'57	635'36	634'91
TEMPERATURE OF THE BIPOLAR MAGNET.												
APRIL.	52'0	52'0	51'9	50'5	50'3	50'7	51'0	50'6	50'4	50'4	50'4	50'4
1												
2												
3	45'3	45'8	47'3	48'5	49'5	51'0	51'5	52'1	52'2	52'4	52'8	53'0
4	53'4	53'4	53'0	53'2	53'4	53'6	53'6	53'7	53'8	54'0	54'0	53'7
5	51'2	51'6	52'0	52'4	52'9	53'5	53'9	54'0	54'2	54'6	54'9	55'3
6	50'0	50'4	51'4	52'2	53'2	54'0	54'2	54'5	55'2	56'3	57'3	57'5
7	54'0	54'0	54'9	55'7	56'1	56'5	56'6	56'6	56'6	57'0	57'9	58'0
8	50'8	51'7	52'5	53'5	54'4	55'0	55'5	55'8	56'8	57'6	58'7	59'2
9												
10	51'5	55'4	55'9	58'0	59'2	59'4	60'2	61'0	62'0	62'7	63'5	64'9
11	59'6	59'4	58'6	58'5	58'4	58'8	59'2	59'2	59'5	59'5	59'4	59'0
12	54'1	55'2	56'0	56'2	57'0	57'5	57'5	58'2	58'5	59'1	60'0	60'0
13	54'5	54'5	51'2	53'5	53'5	53'5	53'5	54'0	54'0	54'0	54'0	54'1
14	49'9	50'4	50'7	51'2	51'5	52'0	52'8	53'2	53'6	54'0	54'6	54'5
15	51'5	52'9	54'0	54'8	55'5	56'6	56'6	56'6	57'2	58'0	58'9	59'9
16												
17	52'8	53'4	54'0	54'1	54'1	54'6	55'0	55'2	56'0	56'3	56'3	56'6
18	50'0	49'5	49'3	49'6	49'6	50'5	50'7	50'3	49'5	49'5	49'5	49'0
19	44'0	44'2	45'8	47'5	48'0	48'9	49'7	50'0	50'4	50'9	51'7	51'9
20	17'4	48'0	49'2	49'8	50'3	51'0	51'4	51'8	52'4	53'0	54'0	54'7
21 a												
22	53'4	53'0	53'0	52'9	53'3	53'6	54'2	54'7	55'8	56'2	56'8	57'3
23												
24	47'4	47'4	47'9	48'0	48'2	49'0	49'5	50'1	50'6	51'2	51'2	51'0
25	46'2	47'6	49'0	50'0	50'0	50'4	50'9	51'2	52'0	52'4	52'6	52'6
26	50'0	51'0	52'2	52'6	53'0	53'0	53'0	52'8	53'0	53'0	53'5	58'4
27	49'4	49'8	50'7	51'7	52'4	53'0	53'6	54'0	54'5	55'4	56'0	56'3
28	52'1	52'0	51'5	51'3	51'5	52'0	52'2	52'5	52'6	53'4	54'0	54'0
29	53'2	53'5	53'5	53'4	53'7	54'2	54'5	55'3	55'5	56'2	56'9	57'0
30												
Hourly Means	51'16	51'55	52'05	52'47	52'86	53'40	53'77	54'04	54'40	54'82	55'29	55'69

* Good Friday.

HORIZONTAL FORCE.

One Scale Division = $\frac{1}{1000000}$ parts of the H.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}63$.ure, $1^{\circ}63$.

10 ^b .	11 ^b .	12 ^b .	13 ^b .	14 ^b .	15 ^b .	16 ^b .	17 ^b .	18 ^b .	19 ^b .	20 ^b .	21 ^b .	22 ^b .	23 ^b .	Daily and Monthly Means.
Sc. Div. 635 ²	Sc. Div. 635 ²	Sc. Div. 638 ²	Sc. Div. 621 ²	Sc. Div. 628 ⁰	Sc. Div. 636 ¹	Sc. Div. 622 ⁰	Sc. Div. 605 ⁰	Sc. Div. 607 ⁰	Sc. Div. 610 ²	Sc. Div. 602 ⁰	Sc. Div. 600 ⁴	Sc. Div. 605 ⁰	Sc. Div. 621 ⁵	Sc. Div. 619 ⁹⁸
665 ⁴	634 ⁰	633 ²	617 ⁷	616 ¹	614 ⁰	597 ⁵	590 ⁰	602 ⁰	599 ⁰	627 ⁰	628 ⁵	625 ⁵	626 ⁰	615 ⁰⁸
626 ⁴	628 ⁰	629 ⁸	626 ⁵	627 ⁰	630 ⁰	628 ⁰	629 ⁰	629 ⁰	626 ⁸	627 ⁵	629 ⁰	631 ⁰	631 ⁴	621 ²⁸
625 ⁰	640 ⁰	632 ⁰	631 ⁰	627 ⁰	629 ⁰	634 ⁰	546 ⁵	565 ⁵	587 ¹	618 ³	633 ²	625 ⁸	620 ²	615 ⁵⁰
628 ⁵	633 ⁰	639 ⁰	643 ⁰	602 ⁰	647 ⁸	635 ⁵	405 ⁴	522 ³	462 ⁷	181 ⁸	277 ⁵	519 ⁷	579 ⁹	560 ⁸⁸
640 ⁰	631 ²	616 ⁴	603 ²	596 ²	607 ²	610 ⁰	593 ⁰	604 ⁴	610 ⁰	613 ⁰	611 ²	608 ²	603 ²	600 ¹⁰
619 ⁸	620 ⁰	618 ²	617 ⁰	617 ⁰	619 ⁰	618 ⁸	618 ⁰	618 ⁰	615 ⁸	616 ⁰	624 ⁰	626 ⁰	626 ⁵	616 ⁸³
617 ³	621 ⁰	623 ²	617 ⁰	619 ⁶	614 ⁰	617 ⁶	613 ⁰	620 ⁰	618 ²	622 ⁵	621 ⁰	622 ⁵	622 ⁰	616 ³³
625 ⁵	623 ⁰	622 ⁰	623 ⁰	623 ⁰	625 ⁰	625 ⁰	624 ¹	626 ⁰	627 ⁰	627 ⁰	627 ⁰	627 ²	628 ⁸	621 ⁶²
625 ⁰	624 ⁸	625 ⁸	624 ⁰	625 ⁰	625 ⁸	626 ²	627 ²	628 ⁸	629 ²	630 ⁰	630 ⁶	630 ¹	631 ⁰	626 ²¹
636 ⁷	638 ²	637 ⁶	636 ⁰	634 ⁴	635 ⁰	637 ⁰	638 ²	638 ⁰	638 ⁰	637 ⁸	641 ⁵	641 ⁶	644 ⁰	631 ⁸⁰
640 ⁰	639 ²	640 ⁰	640 ⁰	640 ⁰	640 ⁸	638 ⁰	638 ⁸	639 ⁰	639 ⁵	641 ⁶	642 ⁰	645 ⁰	645 ⁰	635 ⁶¹
638 ⁸	639 ²	637 ⁴	602 ⁰	605 ⁵	603 ⁰	612 ⁰	597 ⁰	620 ⁰	624 ⁰	627 ²	626 ⁵	625 ⁰	628 ²	623 ⁶³
637 ⁰	639 ⁰	640 ⁰	652 ⁰	628 ⁰	637 ⁰	632 ⁰	628 ⁰	635 ⁸	636 ⁰	638 ¹	632 ⁶	634 ⁹	634 ⁹	621 ⁷³
642 ⁴	645 ⁰	640 ²	631 ⁹	636 ⁰	636 ⁰	636 ¹	636 ⁹	637 ⁰	639 ⁰	638 ⁵	639 ⁰	637 ⁰	642 ⁰	629 ²³
639 ²	633 ⁸	634 ⁰	635 ⁰	623 ⁰	615 ⁸	619 ⁰	619 ²	618 ²	592 ⁴	555 ⁰	556 ⁵	622 ⁰	636 ¹	635 ⁹⁶
624 ⁰	621 ⁰	624 ⁰	623 ¹	617 ⁰	622 ²	625 ⁰	623 ⁴	633 ²	635 ⁰	636 ⁵	641 ⁰	638 ⁵	638 ²	620 ⁸⁹
638 ⁰	638 ⁰	637 ⁸	638 ⁰	639 ²	639 ⁰	645 ⁰	638 ⁰	640 ⁴	641 ²	643 ⁰	643 ²	644 ⁴	643 ⁰	621 ⁷⁰
640 ⁰	637 ⁹	640 ⁰	637 ³	635 ⁹	639 ⁰	638 ⁸	641 ⁰	641 ⁶	640 ⁶	641 ⁰	642 ⁸	642 ⁵	643 ⁰	635 ⁹¹
637 ⁸	637 ⁹	637 ⁰	637 ⁸	639 ⁰	639 ²	640 ⁵	639 ⁰	639 ⁸	641 ⁰	642 ¹	643 ¹	644 ⁰	644 ⁵	636 ¹⁷
637 ³	638 ⁰	642 ⁰	638 ⁵	634 ⁰	637 ⁰	638 ⁰	639 ⁰	637 ⁰	637 ⁸	640 ²	642 ²	642 ²	643 ²	637 ⁰⁰
643 ⁰	642 ⁰	641 ⁰	639 ⁰	642 ¹	639 ⁸	644 ²	656 ²	656 ⁰	634 ⁰	617 ⁷	616 ¹	620 ⁰	622 ²	638 ⁸⁰
646 ⁵	640 ²	634 ⁸	616 ⁸	607 ⁸	618 ⁰	625 ⁰	616 ¹	614 ⁰	616 ⁶	617 ⁰	617 ⁸	632 ⁰	631 ⁰	638 ⁴⁵
635 ³⁶	634 ⁹¹	632 ⁴⁶	625 ⁹⁹	626 ¹⁸	627 ²¹	620 ⁸²	624 ⁵⁹	624 ⁴⁷	625 ²⁵	626 ⁵⁷	630 ²¹	631 ⁹⁵	625 ¹⁸	621 ²⁷

TEMPERATURE OF THE BIFILAR MAGNET.

50 ⁴	50 ⁴	50 ⁵	50 ⁰	49 ⁶	49 ⁴	49 ⁰	48 ⁷	46 ⁰	45 ⁸	45 ⁶	45 ⁶	45 ⁵	45 ⁵	49 ²⁴
52 ⁸	53 ⁰	52 ⁹	52 ⁶	52 ⁶	52 ²	52 ²	52 ²	52 ⁴	52 ⁴	52 ⁷	53 ⁵	53 ⁶	53 ⁴	51 ⁴²
54 ⁰	53 ⁷	53 ⁴	53 ⁰	52 ⁸	52 ⁹	52 ³	51 ⁸	51 ⁵	51 ⁴	51 ⁴	51 ⁴	51 ⁴	51 ⁵	52 ⁸²
54 ⁹	55 ³	55 ⁷	55 ¹	55 ⁰	54 ²	54 ¹	54 ⁰	54 ⁰	53 ²	53 ²	53 ²	52 ⁶	51 ⁰	53 ⁵⁷
57 ³	57 ⁵	57 ⁹	57 ⁰	56 ²	55 ⁶	55 ²	54 ⁸	54 ⁰	53 ⁶	53 ²	53 ⁰	53 ¹	53 ²	54 ²⁹
57 ⁹	58 ⁰	58 ²	57 ⁸	57 ²	56 ⁰	55 ⁰	54 ²	53 ⁷	53 ⁴	53 ⁰	52 ²	51 ⁷	51 ²	55 ³¹
58 ⁷	59 ²	59 ⁸	59 ⁰	58 ⁶	57 ⁹	57 ⁶	57 ⁴	56 ⁴	56 ⁰	55 ⁷	55 ⁵	55 ¹	54 ⁶	56 ⁰⁵
63 ⁵	64 ⁹	61 ⁴	63 ⁹	63 ⁵	63 ⁰	62 ⁵	61 ⁹	61 ⁰	60 ⁹	60 ⁴	60 ¹	60 ⁰	59 ⁸	60 ⁷⁵
59 ⁴	59 ⁰	58 ⁵	58 ³	58 ⁰	58 ⁰	58 ⁰	57 ⁸	57 ⁶	57 ²	57 ⁰	56 ⁴	56 ⁰	55 ⁴	58 ²²
60 ⁰	60 ⁰	60 ⁰	59 ²	59 ⁰	58 ⁶	58 ⁴	58 ²	58 ⁰	57 ⁶	57 ³	57 ⁰	56 ⁰	55 ²	57 ⁶⁶
54 ⁰	54 ¹	54 ⁰	53 ⁸	53 ²	52 ⁵	52 ⁰	51 ⁵	51 ⁰	50 ⁷	50 ⁴	50 ⁰	49 ⁶	50 ⁰	52 ⁷⁶
54 ⁶	54 ⁵	54 ⁰	53 ⁵	53 ²	53 ⁰	52 ⁷	52 ⁸	52 ⁸	52 ⁵	52 ³	51 ⁵	51 ⁵	51 ⁴	52 ⁴⁸
58 ⁹	59 ⁹	59 ⁹	58 ⁶	57 ²	56 ⁵	56 ¹	56 ⁰	55 ⁰	54 ⁵	54 ⁰	53 ⁶	53 ⁵	53 ²	55 ⁸⁶
56 ³	56 ⁶	57 ⁰	56 ⁵	56 ⁰	55 ⁵	55 ⁰	55 ⁰	54 ⁰	54 ⁰	53 ⁴	53 ⁰	52 ⁶	51 ⁶	54 ⁶⁷
49 ⁵	49 ⁰	48 ⁸	48 ²	48 ⁶	48 ⁴	48 ⁴	48 ²	48 ³	48 ⁰	46 ⁷	46 ⁰	45 ⁵	45 ¹	48 ⁶⁴
51 ⁷	51 ⁹	52 ²	52 ⁰	51 ⁵	51 ⁰	50 ⁵	49 ⁹	49 ⁰	48 ⁹	48 ³	48 ¹	47 ⁸	47 ⁵	49 ¹⁵
54 ⁰	54 ⁷	55 ⁰	54 ⁵	53 ⁶	53 ⁴	53 ²	53 ¹	53 ³	53 ⁶	54 ⁰	54 ⁵	54 ⁶	54 ⁰	52 ⁴⁹
56 ⁸	57 ³	57 ⁵	57 ²	56 ⁷	56 ¹	55 ⁸	55 ⁶	55 ⁰	49 ⁵	49 ⁰	48 ⁵	48 ⁰	47 ⁶	53 ⁴⁹
51 ²	51 ⁰	50 ⁸	50 ⁴	50 ²	49 ⁶	49 ⁰	48 ⁸	48 ⁵	48 ²	47 ⁷	47 ⁴	46 ⁹	46 ²	48 ⁹⁷
52 ⁶	52 ⁶	52 ⁶	52 ⁰	51 ⁵	50 ⁷	50 ⁴	50 ⁴	50 ⁵	50 ²	50 ⁰	50 ⁰	50 ⁰	50 ⁰	50 ⁵⁵
53 ⁵	58 ⁴	64 ⁴	53 ⁸	52 ⁷	52 ²	51 ⁹	51 ⁶	51 ⁵	51 ²	50 ⁵	50 ³	50 ⁰	49 ⁷	52 ³⁰
56 ⁰	56 ³	54 ⁵	55 ⁵	55 ⁰	54 ⁵	54 ⁴	54 ¹	54 ⁰	53 ⁴	53 ²	53 ⁰	52 ⁸	52 ⁵	53 ⁵⁷
54 ⁰	54 ⁰	56 ⁸	54 ⁶	54 ⁶	54 ⁴	54 ⁴	54 ⁴	54 ⁴	54 ⁰	53 ⁹	53 ⁹	54 ⁰	54 ⁰	53 ³⁴
56 ⁹	57 ⁰	56 ²	55 ⁶	54 ⁶	54 ⁶	54 ⁰	53 ⁴	52 ⁴	52 ²	51 ⁹	51 ⁵	51 ²	50 ⁷	54 ⁰⁶
55 ²⁹	55 ⁶⁹	55 ⁵⁴	55 ⁰³	54 ⁶⁰	54 ¹²	53 ⁷⁸	53 ⁵²	52 ⁸²	52 ⁵³	52 ²²	51 ⁹⁹	51 ⁷³	51 ³⁵	53 ³⁶

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MAY.	1 627'5	628'0	626'0	612'0	617'0	611'5	612'2	616'2	626'2	634'6	631'8	638'4
	2 638'0	638'0	633'0	614'8	608'5	605'5	620'5	630'0	610'8	637'1	642'0	643'0
	3 635'2	633'2	617'2	619'0	610'0	606'9	611'3	620'0	628'5	630'0	625'0	630'0
	4 631'0	630'0	623'8	620'5	605'0	598'0	612'0	626'0	639'0	618'0	630'0	635'5
	5 632'0	632'0	623'0	612'5	603'0	604'0	603'0	612'0	615'0	621'0	631'0	624'6
	6 623'0	610'0	619'5	603'2	607'0	595'0	598'0	600'8	606'4	621'2	616'0	611'0
	7 —	—	—	—	—	—	—	—	—	—	—	—
	8 600'0	597'0	597'5	585'0	591'8	590'4	600'5	603'7	611'2	625'0	622'2	630'0
	9 618'2	616'0	605'4	602'0	608'6	608'0	625'0	621'2	623'0	633'0	616'0	628'0
	10 611'5	586'0	579'0	597'0	589'5	614'0	585'5	602'0	599'0	614'0	619'8	625'0
	11 622'0	619'2	620'0	610'0	610'0	607'5	607'0	610'0	618'5	623'5	624'0	623'8
	12 636'5	635'5	629'0	623'5	621'0	616'0	633'5	635'0	640'8	644'2	633'0	626'1
	13 628'0	623'0	618'0	615'4	610'5	612'2	616'0	627'0	627'0	637'1	635'8	634'5
	14 —	—	—	—	—	—	—	—	—	—	—	—
	15 642'2	636'8	624'4	618'0	616'2	618'2	623'0	632'0	640'0	642'0	638'0	638'0
	16 635'9	624'7	626'9	619'0	613'0	616'0	625'0	626'0	640'5	642'2	635'0	632'5
	17 634'0	633'0	625'0	611'0	609'5	603'0	617'0	625'0	635'0	630'8	658'0	643'4
	18 595'4	617'0	611'0	612'0	607'0	605'0	599'0	582'2	621'5	622'8	629'2	612'8
	19 599'5	612'0	593'0	574'2	575'0	578'2	591'8	586'1	593'2	603'0	614'2	605'0
	20 600'4	598'6	595'0	584'9	594'0	605'8	595'0	603'0	610'0	605'8	608'0	611'5
	21 —	—	—	—	—	—	—	—	—	—	—	—
	22 621'8	626'7	620'0	607'8	600'0	598'8	606'0	619'8	618'5	621'5	610'0	620'0
	23 624'0	623'0	622'8	611'0	600'0	597'5	598'0	603'0	614'0	618'0	617'2	621'4
	24 630'5	627'0	611'5	610'0	606'4	609'0	610'0	616'8	624'8	591'2	612'2	614'0
	25 616'0	606'0	607'0	614'2	606'0	600'4	603'2	610'4	616'1	625'0	615'0	626'5
	26 610'0	612'2	612'4	604'3	603'0	604'1	607'0	619'8	621'0	618'8	621'0	619'0
	27 617'0	608'0	588'5	597'0	588'0	598'5	602'0	616'9	614'0	627'2	638'0	647'0
	28 —	—	—	—	—	—	—	—	—	—	—	—
	29 608'0	612'0	610'8	589'0	591'8	600'0	602'5	605'0	607'0	610'2	614'0	612'2
	30 615'5	613'0	606'0	601'0	598'0	600'0	604'0	606'5	613'2	618'8	617'8	614'3
	31 630'9	627'5	631'6	617'2	606'8	612'8	620'5	617'2	618'2	633'6	636'0	619'8
Hourly Means	621'63	619'46	613'97	606'87	603'58	604'31	608'46	613'84	620'83	625'17	626'30	625'46
TEMPERATURE OF THE BILAR MAGNET.												
MAY.	1 50'7	50'6	50'7	51'5	52'2	53'3	53'6	53'7	53'8	54'0	54'4	54'6
	2 52'0	52'2	52'5	53'6	54'6	55'6	56'2	57'0	58'0	59'0	59'2	59'2
	3 56'0	57'0	57'8	58'7	60'0	60'5	60'5	60'7	61'0	61'8	62'4	62'7
	4 57'2	57'5	57'8	58'4	59'7	60'5	61'2	60'8	60'6	60'2	60'1	59'6
	5 59'7	60'5	62'0	63'5	64'4	65'2	66'0	66'7	67'5	67'3	68'6	68'4
	6 63'5	64'3	64'8	65'5	66'0	66'8	67'5	68'2	68'8	69'8	70'4	70'6
	7 —	—	—	—	—	—	—	—	—	—	—	—
	8 59'5	59'5	59'9	60'8	60'5	60'8	61'2	61'5	62'0	62'4	62'9	63'0
	9 58'0	58'5	59'2	60'0	60'7	61'0	61'4	61'8	62'2	62'4	62'0	62'0
	10 58'7	59'5	60'5	61'2	62'2	62'2	62'2	62'5	62'4	62'4	62'5	62'4
	11 57'6	57'5	57'0	57'3	57'6	58'2	58'5	58'0	58'0	57'8	58'0	58'2
	12 53'6	54'3	55'1	56'0	57'0	57'6	58'0	58'6	59'2	59'8	60'6	61'0
	13 54'0	53'8	53'5	53'6	53'8	53'3	53'0	53'9	54'1	55'0	55'7	54'9
	14 —	—	—	—	—	—	—	—	—	—	—	—
	15 52'6	53'5	54'3	55'0	56'1	56'9	57'7	58'2	58'8	58'8	58'6	58'3
	16 56'6	56'7	57'0	57'4	58'2	58'9	59'4	59'5	60'0	60'3	60'7	61'0
	17 56'1	56'7	57'8	58'7	59'7	60'4	60'8	61'5	62'4	63'4	64'0	64'4
	18 58'8	60'0	60'9	62'0	62'5	63'0	63'5	64'4	65'0	66'2	67'2	67'6
	19 62'5	62'5	63'2	64'4	66'0	67'0	68'3	69'2	69'9	70'5	70'5	70'5
	20 65'0	64'8	65'1	65'9	66'9	67'7	68'8	69'0	69'6	69'7	69'7	69'5
	21 —	—	—	—	—	—	—	—	—	—	—	—
	22 61'0	63'7	63'6	63'8	64'5	64'5	65'6	65'0	65'7	66'3	66'2	66'1
	23 62'4	62'0	62'3	62'3	62'1	62'6	62'6	62'4	62'5	63'0	63'4	63'5
	24 60'9	61'5	62'0	62'2	63'2	64'0	64'9	65'9	67'0	67'6	68'6	74'2
	25 63'5	64'0	64'0	64'6	64'8	65'8	67'0	67'6	68'5	69'6	71'1	71'2
	26 64'2	64'9	65'6	66'0	66'5	66'7	67'0	67'2	68'0	68'4	70'4	70'3
	27 62'2	62'8	63'5	64'2	65'1	65'8	66'1	66'5	67'2	68'0	68'5	69'5
	28 —	—	—	—	—	—	—	—	—	—	—	—
	29 65'3	65'5	66'1	66'5	67'5	67'7	68'5	69'2	69'5	70'3	71'0	71'8
	30 66'3	66'8	67'4	68'0	68'5	68'5	68'8	69'2	69'2	68'9	68'6	68'6
	31 59'5	60'0	60'5	60'8	61'0	60'9	60'9	61'0	61'0	62'0	62'4	62'4
Hourly Means	59'27	59'65	60'15	60'81	61'53	62'05	62'55	62'92	63'40	63'90	64'37	64'65

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
51° 8'	638° 4'	641° 0'	630° 9'	634° 0'	635° 0'	634° 9'	638° 0'	638° 4'	623° 0'	628° 8'	632° 0'	630° 0'	636° 5'	629° 33'
42° 0'	643° 0'	640° 0'	637° 0'	622° 0'	616° 0'	617° 0'	614° 4'	617° 0'	625° 8'	627° 0'	628° 0'	625° 0'	631° 2'	627° 15'
25° 0'	630° 0'	632° 0'	623° 0'	624° 5'	628° 0'	625° 0'	622° 1'	624° 1'	625° 8'	626° 2'	630° 0'	618° 5'	639° 0'	624° 35'
30° 0'	635° 5'	634° 2'	630° 0'	631° 5'	627° 2'	630° 0'	630° 8'	631° 5'	631° 2'	631° 4'	627° 0'	631° 0'	632° 0'	627° 77'
31° 0'	624° 6'	626° 4'	612° 2'	612° 8'	617° 1'	610° 8'	615° 9'	619° 2'	618° 4'	615° 0'	616° 2'	617° 8'	621° 0'	617° 33'
16° 0'	611° 0'	620° 0'	615° 0'	617° 8'	608° 5'	608° 8'	609° 4'	—	—	—	—	—	—	—
22° 2'	630° 0'	631° 2'	611° 0'	607° 0'	597° 5'	605° 2'	598° 5'	614° 0'	608° 5'	601° 5'	603° 0'	611° 0'	615° 5'	610° 17'
16° 0'	628° 0'	622° 5'	622° 0'	621° 8'	621° 0'	620° 0'	620° 0'	623° 0'	602° 0'	598° 5'	602° 5'	616° 5'	618° 0'	606° 69'
19° 8'	625° 0'	620° 0'	611° 7'	617° 5'	608° 0'	602° 0'	605° 0'	608° 8'	606° 0'	597° 1'	610° 0'	618° 4'	604° 0'	618° 33'
24° 0'	623° 8'	627° 0'	626° 8'	622° 0'	633° 0'	631° 3'	634° 0'	629° 0'	627° 8'	632° 0'	631° 8'	632° 0'	637° 0'	606° 07'
33° 0'	626° 1'	625° 9'	626° 1'	624° 2'	624° 5'	624° 0'	615° 0'	615° 4'	627° 6'	628° 0'	625° 0'	627° 2'	629° 0'	623° 30'
35° 8'	634° 5'	635° 8'	632° 2'	633° 0'	635° 5'	633° 0'	638° 0'	—	—	—	—	—	—	627° 75'
38° 0'	638° 0'	635° 0'	635° 0'	634° 0'	635° 0'	637° 3'	639° 0'	636° 0'	636° 0'	637° 1'	637° 0'	639° 0'	642° 8'	630° 00'
35° 0'	632° 5'	637° 0'	629° 5'	630° 5'	630° 8'	636° 6'	633° 8'	635° 8'	633° 9'	630° 0'	629° 0'	633° 0'	632° 0'	633° 75'
58° 0'	643° 4'	618° 2'	634° 2'	631° 8'	627° 1'	597° 1'	601° 0'	592° 0'	515° 2'	546° 5'	606° 5'	621° 0'	603° 5'	630° 36'
29° 2'	612° 8'	622° 3'	780° 0'	666° 3'	597° 0'	613° 0'	600° 0'	599° 0'	597° 5'	594° 0'	601° 5'	603° 5'	605° 0'	613° 28'
14° 2'	605° 0'	597° 0'	605° 0'	604° 0'	603° 0'	601° 5'	609° 5'	625° 0'	603° 0'	614° 6'	612° 0'	597° 5'	599° 8'	616° 42'
08° 0'	611° 5'	604° 0'	608° 0'	606° 1'	612° 0'	609° 5'	610° 0'	—	—	—	—	—	—	600° 00'
10° 0'	620° 0'	616° 0'	616° 0'	617° 0'	615° 8'	616° 0'	616° 2'	612° 2'	593° 5'	609° 8'	609° 2'	610° 0'	609° 2'	604° 40'
17° 2'	621° 4'	622° 8'	620° 2'	621° 4'	622° 8'	623° 9'	621° 3'	616° 4'	615° 5'	617° 5'	619° 2'	620° 0'	621° 0'	615° 73'
12° 2'	614° 0'	639° 0'	609° 0'	605° 8'	606° 0'	606° 0'	607° 2'	627° 9'	627° 4'	630° 0'	630° 8'	623° 5'	631° 0'	619° 00'
15° 0'	626° 5'	617° 0'	605° 0'	605° 4'	606° 0'	607° 0'	600° 0'	607° 0'	610° 5'	608° 5'	612° 0'	613° 0'	612° 0'	612° 48'
21° 0'	619° 0'	619° 0'	616° 0'	617° 2'	619° 0'	607° 0'	613° 2'	587° 0'	601° 0'	608° 2'	610° 0'	610° 0'	608° 4'	608° 78'
33° 0'	647° 0'	628° 0'	611° 0'	606° 5'	615° 4'	616° 2'	618° 0'	597° 8'	585° 0'	603° 7'	616° 8'	616° 0'	—	612° 41'
44° 0'	612° 2'	609° 2'	611° 0'	612° 2'	612° 0'	611° 9'	611° 1'	609° 0'	609° 0'	610° 0'	610° 2'	609° 0'	608° 8'	612° 22'
17° 8'	614° 3'	613° 0'	612° 2'	616° 3'	618° 0'	618° 4'	618° 8'	608° 3'	610° 2'	610° 8'	610° 0'	612° 2'	612° 0'	608° 06'
36° 0'	619° 8'	640° 0'	636° 2'	638° 0'	612° 0'	608° 0'	611° 0'	613° 0'	619° 0'	613° 0'	613° 0'	621° 0'	620° 0'	612° 66'
26° 30'	625° 46'	624° 94'	626° 16'	621° 50'	617° 90'	616° 83'	616° 82'	618° 09'	612° 86'	614° 34'	618° 99'	620° 07'	621° 11'	617° 48'

TEMPERATURE OF THE BIFILAR MAGNET.

51° 4'	51° 6'	55° 0'	54° 6'	54° 4'	54° 0'	54° 0'	53° 4'	53° 0'	53° 0'	52° 5'	52° 4'	52° 3'	52° 0'	53° 07'
59° 2'	59° 2'	59° 0'	58° 8'	58° 5'	57° 5'	57° 3'	56° 8'	56° 3'	56° 3'	56° 3'	56° 3'	56° 0'	56° 0'	56° 43'
62° 4'	62° 7'	62° 8'	62° 0'	61° 8'	61° 5'	61° 4'	61° 0'	60° 2'	59° 8'	59° 2'	59° 0'	58° 2'	57° 1'	60° 13'
60° 1'	59° 6'	59° 5'	59° 4'	59° 4'	59° 3'	59° 1'	59° 2'	59° 3'	59° 2'	59° 2'	59° 4'	59° 4'	59° 3'	59° 39'
68° 6'	68° 4'	67° 6'	66° 7'	66° 0'	65° 5'	65° 3'	64° 6'	64° 5'	64° 3'	63° 8'	63° 2'	63° 0'	62° 5'	64° 87'
70° 4'	70° 6'	70° 2'	70° 0'	69° 0'	68° 5'	68° 4'	68° 0'	—	—	—	—	—	—	—
62° 9'	63° 0'	62° 6'	62° 4'	61° 8'	61° 3'	60° 8'	60° 4'	62° 5'	62° 0'	61° 3'	60° 9'	60° 3'	59° 5'	66° 12'
62° 0'	62° 0'	62° 0'	61° 5'	61° 0'	60° 6'	60° 5'	60° 4'	60° 0'	59° 5'	59° 0'	58° 6'	58° 0'	57° 6'	60° 67'
62° 5'	62° 4'	62° 0'	61° 5'	61° 0'	60° 6'	60° 2'	59° 6'	60° 2'	59° 7'	59° 4'	59° 4'	58° 6'	58° 6'	60° 52'
58° 0'	58° 2'	58° 5'	58° 2'	57° 6'	57° 5'	57° 0'	56° 6'	59° 2'	58° 9'	58° 7'	58° 3'	58° 0'	58° 0'	60° 61'
60° 6'	61° 0'	61° 0'	60° 2'	59° 5'	58° 6'	58° 2'	57° 2'	56° 6'	55° 9'	55° 2'	54° 8'	54° 5'	53° 9'	57° 07'
55° 7'	54° 9'	54° 1'	53° 3'	52° 8'	52° 6'	52° 3'	52° 0'	56° 0'	55° 5'	55° 5'	55° 0'	54° 9'	54° 0'	57° 40'
58° 6'	58° 3'	58° 3'	58° 0'	57° 5'	57° 4'	57° 2'	57° 0'	53° 0'	52° 9'	52° 8'	52° 5'	52° 5'	52° 3'	53° 40'
60° 7'	61° 0'	61° 0'	60° 5'	60° 0'	60° 0'	59° 2'	58° 4'	57° 0'	57° 0'	56° 7'	56° 9'	57° 0'	57° 0'	56° 91'
61° 0'	61° 4'	64° 4'	63° 6'	63° 0'	62° 4'	62° 0'	61° 0'	57° 8'	57° 5'	57° 0'	56° 6'	56° 2'	55° 8'	58° 57'
67° 2'	67° 6'	68° 0'	68° 0'	67° 5'	66° 9'	66° 5'	65° 5'	60° 5'	59° 8'	59° 7'	59° 4'	58° 8'	58° 8'	60° 86'
70° 5'	70° 5'	70° 2'	70° 0'	69° 5'	68° 0'	67° 6'	67° 2'	64° 8'	64° 3'	63° 6'	63° 5'	63° 5'	62° 5'	64° 40'
69° 7'	69° 5'	69° 5'	69° 0'	68° 8'	68° 2'	67° 9'	67° 5'	67° 0'	66° 5'	66° 3'	66° 0'	65° 5'	65° 2'	67° 23'
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
66° 2'	66° 1'	66° 3'	66° 0'	65° 5'	65° 3'	65° 0'	64° 4'	63° 6'	63° 5'	63° 9'	63° 8'	64° 0'	64° 2'	66° 90'
63° 4'	63° 5'	63° 6'	63° 4'	63° 0'	62° 6'	62° 0'	61° 5'	63° 8'	63° 4'	63° 0'	63° 0'	62° 8'	62° 6'	64° 59'
58° 6'	74° 2'	70° 5'	69° 9'	69° 5'	69° 0'	67° 8'	67° 0'	61° 5'	61° 3'	61° 0'	60° 8'	60° 8'	60° 9'	62° 23'
71° 1'	71° 2'	71° 0'	71° 0'	69° 3'	68° 6'	67° 6'	67° 1'	66° 6'	66° 0'	65° 5'	65° 0'	64° 6'	64° 0'	66° 07'
70° 4'	70° 3'	70° 3'	69° 0'	68° 1'	67° 8'	67° 2'	66° 6'	65° 7'	65° 2'	64° 5'	63° 9'	63° 2'	63° 0'	67° 01'
58° 5'	69° 5'	69° 0'	68° 9'	68° 0'	67° 7'	67° 4'	67° 0'	—	—	—	—	—	—	66° 65'
—	—	—	—	—	—	—	—	67° 0'	66° 5'	66° 0'	65° 9'	65° 6'	65° 4'	66° 41'
71° 0'	71° 8'	68° 9'	68° 6'	67° 2'	71° 6'	71° 2'	70° 7'	69° 3'	69° 0'	68° 6'	68° 0'	67° 2'	66° 5'	68° 99'
62° 4'	62° 4'	62° 4'	62° 2'	61° 8'	61° 3'	60° 8'	60° 4'	63° 3'	62° 0'	61° 0'	60° 5'	60° 0'	59° 5'	65° 85'
—	—	—	—	—	—	—	—	60° 1'	59° 4'	58° 8'	58° 1'	57° 5'	57° 2'	60° 52'
64° 37'	64° 65'	64° 43'	63° 98'	63° 40'	62° 94'	62° 51'	61° 99'	61° 32'	60° 93'	60° 51'	60° 23'	59° 93'	59° 55'	61° 96'

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JUNE.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	631'8	624'4	621'2	611'3	603'6	606'5	618'4	626'0	630'0	631'0	628'0	626'0
	621'0	618'8	616'0	607'0	595'0	597'4	607'8	620'0	625'0	629'0	628'5	625'2
	617'0	614'8	606'5	598'3	591'5	597'0	600'0	606'5	616'0	619'0	623'0	626'5
	—	—	—	—	—	—	—	—	—	—	—	—
	616'0	612'0	601'2	604'0	597'0	594'0	601'0	606'0	610'4	622'2	621'2	621'2
	620'5	619'0	616'0	614'8	599'9	605'0	601'2	614'1	616'1	621'4	626'8	629'0
	635'2	631'8	625'0	618'1	612'0	613'0	613'0	625'0	633'5	632'5	631'0	631'0
	629'8	623'1	620'0	616'0	610'0	602'0	615'0	622'0	625'0	628'0	626'0	627'0
	628'0	627'0	624'2	620'0	617'6	618'0	624'0	631'2	634'0	625'0	625'2	619'8
	624'0	619'5	617'0	611'0	609'0	622'0	622'5	632'2	644'5	625'8	628'5	635'0
	—	—	—	—	—	—	—	—	—	—	—	—
	622'0	626'5	622'5	613'8	604'2	602'2	614'8	627'0	630'5	631'8	631'1	623'0
	639'5	636'0	630'0	626'2	608'0	608'0	612'0	611'6	628'0	637'0	636'0	634'0
	637'0	638'8	637'0	632'5	618'0	599'0	619'0	637'5	639'5	662'5	651'0	647'0
	628'0	624'0	622'0	610'0	608'5	610'0	608'7	612'0	613'1	622'0	606'0	609'2
	607'0	602'0	597'3	594'0	589'0	591'8	591'2	596'2	596'0	600'2	602'2	597'0
	602'8	604'2	598'4	590'0	589'0	587'5	592'0	596'0	596'2	600'0	601'2	599'0
	—	—	—	—	—	—	—	—	—	—	—	—
	615'8	615'2	606'0	598'0	591'4	582'0	587'0	604'0	617'5	616'0	625'0	629'0
	600'0	612'0	612'0	604'0	599'0	598'5	601'0	607'0	617'0	603'0	610'2	611'9
	617'5	605'0	595'0	596'0	593'2	595'0	607'5	628'0	630'0	632'0	625'4	624'2
	605'5	588'8	604'5	598'0	580'0	585'0	587'0	602'1	604'0	643'0	656'0	627'5
	607'0	608'0	606'8	595'5	589'0	589'0	598'0	610'0	620'0	622'0	618'2	619'0
	613'0	613'2	607'0	601'0	594'0	601'0	612'0	612'0	618'0	622'0	623'6	622'0
	—	—	—	—	—	—	—	—	—	—	—	—
	603'0	605'0	603'8	600'0	586'0	587'0	595'0	598'5	612'0	608'0	625'0	613'0
	608'0	603'5	599'5	590'0	590'5	594'0	594'0	597'0	607'0	602'0	606'0	606'2
	609'0	607'0	600'0	590'8	591'8	596'2	607'8	613'8	611'2	609'2	614'4	616'0
	616'2	607'0	598'2	592'0	592'0	591'2	602'0	610'0	608'0	605'0	614'0	618'0
	615'0	613'2	607'0	606'5	594'0	600'0	607'5	605'0	601'0	618'0	612'0	611'8
Hourly Means	618'06	615'38	611'31	605'34	598'20	598'93	605'36	613'49	618'60	622'60	622'90	621'10
TEMPERATURE OF THE BILAR MAGNET.												
JUNE.	57'4	58'4	59'4	60'0	60'4	61'2	61'5	62'2	62'4	63'2	63'5	63'6
	58'8	59'6	60'8	62'0	63'5	64'0	64'2	64'9	65'4	66'1	67'2	67'4
	64'5	65'3	65'6	66'3	67'4	68'3	69'3	70'0	70'0	71'0	71'3	71'2
	—	—	—	—	—	—	—	—	—	—	—	—
	65'6	66'3	67'3	67'5	67'9	68'0	68'3	68'3	68'2	68'2	68'4	68'2
	61'9	61'9	61'9	62'0	61'9	62'0	62'2	62'6	63'0	63'3	63'9	64'2
	58'6	59'2	59'8	60'3	61'0	61'0	61'5	62'0	62'8	63'4	64'2	65'2
	59'1	60'0	61'0	62'0	63'4	64'2	64'5	65'1	65'7	66'5	67'0	67'4
	62'7	64'0	64'4	65'2	66'3	66'8	67'3	68'0	68'7	69'8	70'4	70'8
	66'3	66'4	67'3	68'0	68'7	69'0	69'7	69'9	70'2	70'8	71'0	71'0
	—	—	—	—	—	—	—	—	—	—	—	—
	61'9	62'0	62'4	62'8	63'0	62'8	62'5	62'4	62'9	63'5	64'2	64'6
	58'4	59'0	59'4	60'0	60'7	61'0	61'0	61'5	62'2	62'5	63'0	63'7
	57'6	57'4	57'8	57'8	58'0	59'3	59'7	59'7	60'5	61'0	61'8	62'6
	60'8	61'9	63'6	65'0	67'4	70'0	72'5	75'0	76'9	78'5	80'2	80'4
	74'5	75'0	76'5	77'6	78'7	79'6	80'8	81'4	81'9	82'8	83'0	82'2
	75'0	75'4	75'6	76'2	77'5	78'7	79'5	79'8	79'5	79'9	80'3	79'5
	—	—	—	—	—	—	—	—	—	—	—	—
	73'0	72'8	73'7	73'9	74'3	74'5	75'8	76'4	76'7	76'6	76'5	76'5
	72'0	72'4	72'5	73'3	73'5	74'0	74'3	74'5	74'8	75'1	75'4	74'5
	69'0	69'3	69'3	69'5	69'9	69'9	70'0	70'2	70'5	71'0	71'8	72'4
	67'4	67'0	67'5	68'5	69'4	70'0	70'5	71'4	71'7	72'2	72'3	72'0
	67'6	67'8	67'8	68'0	68'2	70'0	70'7	71'8	73'8	74'2	74'0	72'6
	67'2	67'5	68'3	69'0	69'5	70'3	70'3	70'8	70'8	71'5	72'3	72'5
	—	—	—	—	—	—	—	—	—	—	—	—
	70'0	71'0	71'9	72'3	73'8	74'6	75'7	76'5	77'6	78'2	78'7	78'7
	70'8	71'0	71'6	72'5	72'9	73'9	74'3	75'0	76'0	76'4	77'0	76'5
	73'0	73'0	73'0	73'4	73'6	73'5	73'8	73'8	73'8	74'4	74'6	74'3
	69'4	69'6	70'8	72'0	72'8	72'8	72'6	72'9	73'8	74'4	74'8	75'3
	69'0	69'6	70'2	71'0	71'0	72'2	72'6	73'5	74'4	74'5	75'3	75'2
Hourly Means	65'83	66'26	66'90	67'54	68'26	68'91	69'43	69'97	70'55	71'12	71'62	71'63

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
628'0	626'0	625'0	617'0	616'3	616'0	617'0	617'0	616'2	619'0	619'2	619'8	619'0	619'0	619'95
628'5	625'2	622'0	625'0	622'0	611'8	613'5	612'8	613'0	613'3	616'8	616'1	616'2	616'2	616'68
623'0	626'5	624'0	628'0	609'8	615'0	609'1	597'2	—	—	—	—	—	—	611'94
—	—	—	—	—	—	—	—	614'0	613'8	618'0	618'4	612'2	611'0	613'12
621'2	621'2	620'2	611'0	612'8	612'8	616'0	617'0	620'0	622'1	621'8	619'0	618'0	618'0	621'90
626'8	629'0	628'0	627'2	628'0	629'0	630'0	628'0	627'8	627'0	627'5	630'0	628'0	631'2	626'09
631'0	631'0	629'0	625'0	628'2	628'8	629'0	628'0	626'0	621'8	624'8	626'2	628'2	630'0	621'94
626'0	627'0	625'0	621'0	626'0	623'8	624'8	624'2	624'0	619'1	621'8	623'0	625'1	624'8	619'40
625'2	619'8	621'2	616'2	621'2	622'0	612'1	602'1	608'6	608'2	608'4	615'5	614'8	621'2	618'73
628'5	635'0	616'0	605'0	606'2	607'0	606'8	610'0	—	—	—	—	—	—	623'74
—	—	—	—	—	—	—	—	625'0	617'0	617'0	617'5	617'0	614'0	628'34
631'1	623'0	626'0	625'0	623'0	626'0	626'0	626'5	626'5	625'9	630'0	630'0	626'5	629'0	629'72
636'0	634'0	632'0	630'0	632'0	633'5	630'1	633'5	632'0	631'2	629'4	628'2	631'8	630'2	607'48
651'0	647'0	621'0	629'0	627'2	626'0	62'4	6'8	621'8	630'0	619'0	624'2	627'0	626'0	607'48
606'0	609'2	602'2	600'0	598'8	600'0	4	8	597'0	602'0	601'0	601'0	602'0	604'9	595'45
602'2	597'0	594'2	590'0	592'0	590'3	—	—	592'0	593'2	593'0	595'5	599'0	601'2	598'74
601'2	599'0	595'5	595'0	595'0	598'0	595'0	58'.	—	—	—	—	—	—	604'95
—	—	—	—	—	—	—	—	604'0	603'0	603'0	606'1	607'9	612'0	606'16
625'0	629'0	605'0	612'0	603'8	608'2	598'0	598'8	601'0	600'8	598'0	595'6	606'5	604'2	609'28
610'2	611'9	601'2	605'5	607'0	602'2	597'2	600'0	604'0	604'8	604'5	605'0	610'0	611'0	604'36
625'4	624'2	628'0	613'0	607'0	602'2	602'0	599'4	602'0	604'2	609'9	609'0	603'2	603'2	607'30
656'0	627'5	614'0	615'0	591'0	595'0	601'0	595'2	598'0	586'5	591'0	602'5	607'1	610'0	607'30
618'2	619'0	612'0	618'0	607'5	605'0	607'0	603'0	602'0	598'2	609'0	611'8	607'4	609'8	609'38
623'6	622'0	—	612'0	606'0	611'0	613'0	607'0	—	—	—	—	—	—	601'45
—	—	—	—	—	—	—	—	608'8	602'8	607'2	601'4	602'2	604'0	602'44
625'0	613'0	607'0	593'2	596'0	598'2	599'2	598'5	602'2	600'0	601'0	601'4	598'8	603'0	607'55
606'0	606'2	609'4	601'4	606'2	605'0	605'4	605'4	606'0	605'0	605'5	606'0	607'0	607'0	605'38
614'4	616'0	610'0	610'2	614'0	604'2	602'0	608'0	610'0	610'0	613'5	610'0	611'6	611'2	608'89
614'0	618'0	612'0	612'0	607'5	614'0	606'9	607'0	608'0	600'0	602'0	596'0	606'0	606'2	—
612'0	611'8	608'0	608'0	609'0	616'8	611'8	606'5	607'8	606'0	605'8	618'0	617'2	607'5	—
622'90	621'10	615'50	612'99	611'62	612'01	610'19	609'03	611'47	610'07	611'52	612'28	613'70	614'07	612'32

TEMPERATURE OF THE BIFILAR MAGNET.

63'5	63'6	61'5	61'2	63'5	63'0	62'4	61'6	61'0	60'4	60'0	59'6	59'2	58'9	61'31
67'2	67'4	67'6	67'4	67'0	66'9	66'4	66'1	66'0	65'7	65'5	65'2	65'0	64'8	64'90
71'3	71'2	70'8	70'5	70'0	69'5	69'3	68'7	—	—	—	—	—	—	68'10
—	—	—	—	—	—	—	—	66'5	66'3	66'0	65'8	65'5	65'2	66'21
68'4	68'2	68'0	67'5	66'6	66'2	66'0	65'7	64'4	63'5	63'0	62'5	62'1	61'4	61'87
63'9	64'2	64'0	63'8	63'0	62'6	62'0	61'6	61'2	60'2	6'0	59'0	58'5	58'2	61'57
64'2	65'2	65'3	65'0	64'0	63'1	62'4	61'5	60'6	60'2	59'8	59'4	59'0	58'5	64'23
67'0	67'4	67'4	66'5	66'0	65'6	65'2	64'8	64'4	64'0	63'5	63'1	62'7	62'5	67'73
70'4	70'8	70'6	70'4	69'6	69'4	69'0	68'5	68'1	68'0	67'6	67'0	66'6	66'3	—
71'0	71'0	71'2	71'4	71'0	71'0	70'5	69'5	—	—	—	—	—	—	67'95
—	—	—	—	—	—	—	—	64'5	63'8	63'3	62'7	62'3	61'4	61'82
64'2	64'6	64'3	63'8	63'0	62'2	61'6	60'7	60'3	59'5	59'0	58'5	58'0	57'9	60'93
63'0	63'7	63'0	63'5	62'5	62'0	61'5	61'0	60'4	60'0	59'6	59'2	58'6	58'0	60'78
61'8	62'6	63'4	63'4	63'4	63'6	62'8	62'4	62'0	61'8	61'2	60'8	60'5	60'3	74'02
80'2	80'4	80'8	80'4	79'2	78'6	78'2	77'0	76'0	75'5	75'3	74'9	74'3	74'0	79'29
82'2	82'2	83'3	82'8	81'8	80'8	80'0	79'5	78'5	77'5	77'0	76'5	76'0	75'2	77'12
83'0	82'2	79'5	78'3	78'0	77'5	77'3	77'0	—	—	—	—	—	—	74'58
80'3	79'5	—	—	—	—	—	—	75'4	75'0	74'5	74'0	73'8	73'6	72'51
76'5	76'5	76'0	75'6	75'5	75'0	74'5	74'3	74'0	73'6	73'2	73'0	72'4	72'2	70'09
75'4	74'5	74'0	73'5	72'5	72'6	72'2	71'5	70'7	70'2	70'0	69'2	69'0	68'6	69'84
71'8	72'4	72'6	72'2	71'5	71'3	70'4	69'6	69'5	69'3	68'6	68'5	68'0	67'8	70'48
72'3	72'0	71'6	71'0	70'8	70'5	70'3	70'0	69'5	69'0	68'8	68'4	68'2	68'1	74'63
74'0	72'6	72'6	71'8	71'2	70'6	70'0	69'5	69'1	68'6	68'2	67'8	67'6	67'4	74'21
72'3	72'5	—	—	—	—	—	—	—	—	—	—	—	—	72'71
78'7	78'7	78'4	77'0	76'0	75'7	75'0	74'2	73'5	73'1	72'9	72'6	72'0	71'6	72'44
77'0	76'5	76'0	75'6	75'6	75'3	75'0	74'5	74'2	73'8	73'5	73'3	73'0	73'0	73'02
74'6	74'3	74'1	73'7	73'4	72'8	72'5	72'3	71'5	71'0	70'5	70'0	69'7	69'4	—
74'8	75'3	75'1	74'6	74'1	74'0	73'2	72'4	72'0	71'2	71'0	70'7	69'6	69'4	—
75'3	75'2	75'4	75'1	74'5	74'6	74'5	74'1	73'7	73'4	73'2	72'4	71'8	71'2	—
71'62	71'63	71'64	71'18	70'55	70'18	69'69	69'12	68'44	67'95	67'58	67'12	66'70	66'36	68'94

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'80.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	183'3	180'4	180'4	179'9	180'5	178'7	179'0	180'3	180'3	180'3	180'3	180'3
2	171'0	171'0	171'6	169'9	169'8	169'1	169'6	171'3	172'3	172'3	171'7	170'7
3	170'8	170'9	170'9	170'9	170'3	168'3	167'6	169'9	172'0	171'8	169'8	169'0
4	—	—	—	—	—	—	—	—	—	—	—	—
5	179'8	179'8	180'5	179'3	178'4	176'7	175'6	175'6	174'5	174'2	173'1	173'1
6	175'8	176'6	175'1	174'1	172'4	170'7	170'7	171'8	172'3	171'2	172'0	172'6
7	171'1	171'1	171'6	171'3	170'4	169'9	170'1	171'7	172'1	170'6	169'8	169'2
8	160'6	164'3	163'5	164'2	164'9	165'4	165'4	167'8	169'2	169'2	168'5	169'5
9	167'4	167'7	170'0	169'7	169'7	169'7	169'7	169'7	169'7	169'5	169'0	169'3
10	171'4	172'2	170'5	170'6	170'6	169'3	169'7	167'6	170'3	170'7	170'4	170'4
11	—	—	—	—	—	—	—	—	—	—	—	—
12	178'1	175'7	178'2	178'9	178'6	178'6	178'8	171'4	178'6	179'5	179'5	179'2
13	182'0	182'8	183'2	183'6	182'0	180'6	181'6	181'2	179'6	179'6	179'6	179'6
14	178'2	175'5	179'4	178'8	178'3	177'6	176'4	175'2	172'4	171'2	172'8	171'3
15	172'1	172'5	173'5	170'3	166'6	166'9	167'2	166'7	164'4	162'5	162'5	161'4
16	161'9	164'1	161'6	164'4	162'5	164'9	165'5	165'5	164'7	169'0	170'5	169'6
17	174'7	179'0	180'2	178'5	179'9	180'9	178'1	178'2	184'7	182'2	188'0	187'7
18	—	—	—	—	—	—	—	—	—	—	—	—
19	193'7	193'1	193'1	193'0	192'3	189'9	188'9	189'8	189'8	188'7	185'8	184'4
20	191'1	191'1	190'0	188'9	188'9	187'1	187'1	186'6	187'7	184'7	181'7	181'3
21	178'3	179'1	179'9	179'8	180'8	179'8	180'4	180'4	180'2	178'0	176'5	175'9
22	181'7	180'2	183'0	182'3	182'8	184'6	182'5	188'1	187'2	186'2	184'4	183'7
23	188'1	187'8	184'9	184'8	183'1	181'7	179'7	179'7	179'7	179'7	179'0	176'7
24	176'8	179'4	179'2	177'3	175'8	174'8	175'8	174'7	182'3	181'3	179'6	178'4
25	—	—	—	—	—	—	—	—	—	—	—	—
26	170'6	170'6	170'6	169'0	168'6	169'1	168'6	169'2	169'1	166'1	164'7	164'5
27	168'5	167'7	168'9	170'9	172'1	172'0	172'0	171'3	170'9	170'7	169'1	168'5
28	169'4	169'3	169'3	167'9	170'2	168'5	166'4	166'4	168'1	168'1	167'1	168'4
29	169'0	169'0	168'3	166'8	166'8	165'4	164'5	164'5	165'0	164'6	163'0	164'0
30	161'7	161'1	161'1	160'5	159'8	158'2	158'2	159'8	160'4	159'9	159'9	160'3
31	169'7	170'6	170'7	169'5	169'6	174'9	176'5	176'5	177'3	176'3	175'6	173'9
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	174'71	174'91	175'27	174'63	174'29	173'83	173'53	174'03	174'77	174'15	173'48	173'07
TEMPERATURE OF THE VERTICAL FORCE MAG.												
	40'0	40'3	40'5	40'7	40'8	41'0	41'0	41'2	41'6	41'8	42'0	42'0
2	46'2	46'4	46'0	46'0	46'2	46'8	47'0	47'0	46'8	46'8	46'8	47'6
3	47'2	47'0	47'0	46'6	46'6	46'8	47'1	47'8	47'8	48'0	48'6	48'4
4	—	—	—	—	—	—	—	—	—	—	—	—
5	42'6	42'6	42'6	42'6	42'9	43'6	44'2	44'6	45'4	45'7	45'7	46'4
6	45'2	45'6	45'6	45'5	45'6	46'6	47'0	47'4	47'3	47'1	47'1	47'1
7	46'6	46'6	46'6	46'7	46'8	47'6	48'0	48'0	48'2	48'7	48'8	49'0
8	51'2	50'8	50'5	49'7	49'5	49'7	49'7	49'7	49'6	49'4	49'4	49'0
9	49'0	48'8	48'0	47'8	48'0	48'4	48'4	48'6	48'6	48'8	49'0	48'6
10	47'6	47'6	47'2	46'8	46'6	46'9	47'1	47'6	47'6	47'6	47'6	47'0
11	—	—	—	—	—	—	—	—	—	—	—	—
12	41'8	41'0	41'2	41'5	41'4	41'6	42'2	42'6	42'6	42'7	42'7	42'8
13	40'0	40'0	40'0	39'4	39'4	40'0	40'6	41'0	41'6	42'4	42'4	42'8
14	41'8	41'8	41'8	42'0	42'4	43'2	43'8	44'6	46'0	46'8	47'6	47'3
15	45'2	45'2	46'0	45'0	46'4	47'0	47'5	47'8	48'5	49'3	49'6	50'2
16	50'5	50'2	49'6	49'1	49'1	49'0	48'7	48'6	48'2	47'6	47'6	47'6
17	42'0	41'6	40'6	40'2	39'8	39'6	39'4	39'6	38'8	38'8	38'4	37'8
18	—	—	—	—	—	—	—	—	—	—	—	—
19	31'6	32'1	32'2	33'0	33'8	34'0	34'5	35'5	35'9	36'3	37'6	38'6
20	35'0	35'0	35'0	35'5	36'2	36'8	37'1	37'6	38'2	38'6	39'8	39'9
21	41'7	41'3	41'0	40'5	40'2	40'6	40'7	41'0	41'6	42'6	42'6	42'9
22	38'3	37'7	39'1	38'6	39'1	38'1	37'6	37'7	37'9	38'6	39'0	39'7
23	36'0	36'3	37'0	36'7	37'3	38'7	39'8	40'0	40'5	41'0	41'7	42'2
24	42'6	41'6	42'6	41'6	42'1	42'7	43'2	43'6	43'6	43'8	44'4	43'8
25	—	—	—	—	—	—	—	—	—	—	—	—
26	46'6	46'6	46'6	46'6	46'8	47'2	47'6	48'6	48'6	49'4	49'6	50'0
27	47'3	46'0	46'6	45'8	45'4	45'6	45'8	46'6	46'6	47'0	46'8	46'8
28	44'8	45'0	45'2	45'0	45'4	46'4	47'2	48'0	47'8	48'4	48'4	48'7
29	48'8	48'8	48'9	48'6	49'0	49'6	49'7	50'3	50'3	50'3	50'3	50'4
30	51'3	51'3	51'4	51'3	51'6	52'2	52'2	52'4	52'4	52'7	53'1	53'2
31	47'3	46'3	45'3	45'2	43'9	43'5	43'2	43'3	43'3	43'8	44'0	44'6
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	44'01	43'83	43'86	43'63	43'79	44'19	44'47	44'83	45'00	45'33	45'57	45'71

12h.
Sc. Div.
170'8
169'5
169'0
—
172'4
171'4
170'2
170'0
169'3
171'7
—
178'8
178'2
169'5
162'0
170'9
187'7
—
185'7
181'0
171'9
182'8
188'6
178'4
—
164'9
168'7
167'6
164'0
158'9
174'9
—
172'92
—
42'8
47'6
48'6
—
46'7
47'0
48'8
48'8
49'0
46'2
—
42'6
42'6
47'5
50'5
47'2
36'6
—
38'2
39'9
41'6
39'4
42'8
43'6
—
50'0
46'6
49'0
50'0
53'5
44'6
—
45'73

re, 1° 80.

10h.	11h.
Sc. Div.	Sc. Div.
180°3	180°3
171°7	170°7
169°8	169°0
173°1	173°1
172°0	172°6
169°8	169°2
168°5	169°5
169°0	169°3
170°4	170°4
179°5	179°2
179°6	179°6
172°8	171°3
162°5	161°4
170°5	169°6
188°0	187°7
185°8	184°4
181°7	181°3
176°5	175°9
181°4	183°7
179°0	176°7
179°6	178°4
164°7	164°5
169°1	168°5
167°1	168°4
163°0	164°0
159°9	160°3
175°6	173°9
173°48	173°07

VERTICAL FORCE.

One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
170°8	167°5	165°4	177°6	176°6	177°5	177°5	176°0	176°0	173°4	173°4	173°2	177°03
169°5	169°5	169°5	169°5	168°4	168°4	168°4	170°0	171°1	172°3	172°3	172°3	170°48
169°0	169°9	170°7	172°2	169°9	171°0	—	179°6	179°6	179°4	179°9	179°8	172°63
172°4	173°5	173°7	173°6	172°5	172°5	172°5	173°7	174°9	175°2	175°2	175°2	175°23
171°4	173°0	175°1	175°6	175°1	175°3	175°3	168°5	174°3	174°4	172°7	172°7	173°28
170°2	170°3	169°8	169°8	167°5	167°8	166°7	164°8	164°8	157°1	155°1	162°4	168°13
170°0	169°5	169°5	169°2	169°2	169°8	169°8	169°8	168°8	168°8	167°0	167°2	167°55
169°3	169°3	169°3	170°6	170°6	170°6	170°1	169°2	169°5	169°7	169°6	170°5	169°56
171°7	172°4	172°4	172°5	173°4	172°4	—	180°3	176°7	181°1	176°0	180°2	177°7
178°8	178°8	179°6	179°6	180°0	179°8	180°0	180°0	180°4	180°4	180°4	181°0	179°25
178°2	180°3	183°2	186°6	183°1	179°5	179°5	179°5	179°5	179°5	178°6	177°8	180°86
169°5	169°8	171°7	171°3	170°5	170°5	170°5	170°0	171°3	166°7	166°0	171°6	172°77
162°0	162°0	162°5	162°4	163°4	162°7	162°7	164°1	162°7	162°7	161°9	161°9	161°91
170°9	170°9	170°9	172°0	170°5	170°5	171°8	170°4	163°3	163°5	168°6	174°7	167°84
187°7	186°2	186°2	185°8	183°2	183°2	—	195°5	196°6	196°3	193°5	193°5	185°77
185°7	186°8	188°8	188°8	189°3	190°5	189°3	189°3	190°2	190°0	189°9	189°6	189°61
181°0	180°5	179°3	179°3	178°2	178°6	177°8	178°6	174°6	178°2	178°2	177°6	182°84
171°9	170°1	173°2	171°9	172°9	174°2	174°5	175°5	178°0	179°1	180°2	180°5	177°11
182°8	183°2	184°7	183°7	183°7	185°7	185°7	186°4	186°8	188°2	188°2	189°6	181°81
188°6	180°8	180°8	180°3	181°7	181°4	182°3	178°4	165°9	176°9	168°2	172°3	180°12
178°4	176°5	174°9	173°4	173°2	172°8	—	172°9	172°9	171°1	170°8	170°6	175°56
164°9	164°9	166°0	166°2	166°2	165°5	165°5	167°3	167°3	167°9	167°9	169°1	167°47
168°7	169°2	170°2	170°2	169°4	170°0	170°3	171°1	171°0	171°2	168°4	170°8	170°13
167°6	169°4	167°9	179°2	170°3	174°9	172°2	170°5	172°1	172°1	168°7	170°9	169°79
164°0	164°5	164°9	163°9	165°1	160°5	163°1	161°6	159°7	160°5	160°5	160°8	164°12
158°9	159°0	159°0	159°0	159°3	160°4	157°4	157°1	157°1	160°2	162°5	167°7	159°94
174°9	175°5	176°2	175°8	175°8	175°8	—	191°6	191°4	191°4	190°0	189°2	178°15
172°92	172°71	173°13	174°07	173°30	173°40	174°92	174°42	174°02	174°01	173°59	174°75	173°99

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

41°8	42°0
46°8	47°6
48°6	48°4
45°7	46°4
47°1	47°1
48°8	49°0
48°4	49°0
49°0	48°6
47°6	47°0
42°7	42°8
42°4	42°8
47°6	47°3
49°6	50°2
47°6	47°6
38°4	37°8
37°6	38°6
39°8	39°9
42°6	42°8
39°0	39°7
41°7	42°2
44°4	43°8
49°6	50°0
46°8	46°8
48°4	48°7
50°3	50°4
53°1	53°2
44°0	44°6
45°57	45°71

42°8	42°6	42°6	43°0	43°0	43°4	43°6	43°1	43°5	44°0	44°6	45°4	42°22
47°6	48°2	47°8	47°6	48°2	48°4	48°1	47°6	47°2	46°8	46°6	47°0	47°12
48°6	48°4	48°6	48°4	48°4	48°5	—	—	—	—	—	—	46°41
46°7	46°8	46°7	46°9	46°8	46°8	46°7	46°4	45°6	45°2	45°0	45°2	45°15
47°0	47°0	46°6	46°6	46°4	46°0	45°8	46°1	46°2	46°4	46°6	46°4	46°42
48°8	49°2	49°5	49°8	50°1	50°3	50°6	50°1	50°2	50°7	50°9	51°0	48°87
48°8	49°0	49°0	49°2	48°8	48°6	48°6	48°7	49°0	49°2	49°1	49°0	49°38
49°0	48°6	48°2	48°4	48°4	48°4	48°4	48°4	48°3	48°5	48°3	48°0	48°15
46°2	46°4	46°0	46°0	45°8	—	—	—	—	—	—	—	45°37
42°6	42°6	42°4	42°2	42°2	42°0	42°0	41°1	41°1	41°0	40°6	40°2	41°84
42°6	42°8	43°2	42°6	42°0	42°0	42°2	42°4	42°4	42°4	42°4	42°4	41°62
47°5	46°8	47°0	47°5	47°6	47°6	47°2	47°0	46°4	46°2	46°0	45°2	45°46
50°5	50°6	50°6	50°6	50°5	50°4	50°3	50°3	50°7	50°9	51°0	50°5	48°94
47°2	47°0	46°8	45°7	45°6	45°2	44°9	44°2	43°8	43°6	42°6	42°5	46°87
36°6	37°6	36°9	36°9	37°0	37°0	—	—	—	—	—	—	37°00
38°2	37°4	36°8	36°9	36°3	36°3	35°9	35°9	35°6	35°4	35°5	35°1	35°43
39°9	40°5	40°8	41°1	41°0	41°4	41°6	41°5	41°5	41°6	41°6	41°6	39°12
44°6	45°6	44°6	44°8	44°1	42°8	41°8	41°2	40°2	39°7	39°3	38°8	41°84
39°4	39°0	38°7	38°2	38°0	37°7	37°3	36°6	36°4	36°0	35°8	35°8	37°93
42°8	42°6	42°4	41°8	41°2	40°8	40°6	40°5	40°8	41°2	41°6	41°8	40°22
43°6	43°6	44°2	45°0	45°2	45°4	—	—	—	—	—	—	44°15
50°0	49°5	49°6	49°1	48°8	49°4	49°5	48°7	48°6	48°4	48°0	47°5	48°39
46°6	46°1	46°2	45°7	46°5	46°5	46°2	45°8	45°8	45°7	45°6	45°2	46°17
49°0	49°5	49°5	49°2	49°3	49°3	49°2	48°8	48°2	47°5	48°8	49°3	47°84
50°0	50°0	49°8	50°4	50°4	50°4	50°5	51°0	51°3	51°3	51°6	51°6	50°14
53°5	53°4	53°4	53°7	53°7	52°9	52°3	51°3	50°7	50°5	49°5	48°4	52°02
44°6	44°4	44°0	43°5	43°5	43°4	—	—	—	—	—	—	41°64
45°73	45°75	45°63	45°59	45°52	45°43	44°27	44°03	43°98	44°00	43°98	43°88	44°67

VERTICAL FORCE.												
One Scale Division = .000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.80.												
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
FEBRUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	184.8	187.3	188.3	188.5	188.5	188.8	188.1	187.2	186.0	186.2	184.0	183.1
3	177.2	177.2	176.7	173.7	173.3	172.7	171.8	170.6	170.3	169.5	168.3	167.6
4	171.6	172.7	170.8	167.3	166.2	164.9	165.9	167.3	168.1	170.3	169.7	169.7
5	167.0	167.0	167.3	164.7	162.5	163.3	164.2	163.9	163.9	162.5	162.5	164.0
6	166.1	166.8	167.5	164.5	163.5	162.1	163.2	163.7	163.7	162.8	161.7	162.7
7	165.9	166.8	169.4	166.3	164.5	163.7	164.2	161.6	164.1	164.6	165.6	165.6
8	—	—	—	—	—	—	—	—	—	—	—	—
9	188.6	189.8	190.0	184.0	189.6	189.6	190.5	190.4	191.1	190.6	189.9	190.6
10	194.1	195.0	194.6	193.4	191.5	190.8	191.5	190.2	188.4	187.1	186.7	186.7
11	180.7	179.7	179.9	179.9	180.2	178.4	177.8	177.1	177.1	178.7	176.8	175.9
12	181.1	182.8	185.0	181.9	181.7	181.7	181.3	179.6	179.6	178.5	177.3	178.6
13	175.5	175.7	174.8	177.1	175.2	174.5	173.2	172.3	171.0	170.0	169.5	169.5
14	171.0	171.6	173.9	174.0	173.0	171.4	171.4	169.8	170.2	169.9	169.2	171.0
15	—	—	—	—	—	—	—	—	—	—	—	—
16	169.3	166.0	173.4	172.4	171.6	171.7	173.8	173.6	177.2	178.3	176.2	176.4
17	175.3	175.2	174.5	173.9	172.4	169.5	169.2	168.5	170.0	170.1	170.6	170.6
18	173.0	176.0	175.3	171.9	169.4	169.4	169.4	171.0	170.3	170.6	171.3	170.3
19	176.6	178.6	180.0	179.1	177.6	176.0	176.0	176.3	176.7	176.8	177.5	178.0
20	180.8	181.4	178.7	178.9	176.2	175.6	175.6	175.3	175.3	172.6	170.5	170.5
21	170.6	170.5	169.8	168.4	167.8	166.5	166.1	165.8	166.4	166.9	167.8	169.0
22	—	—	—	—	—	—	—	—	—	—	—	—
23	183.7	184.5	184.3	177.7	178.6	178.6	177.1	177.6	178.3	177.0	178.3	178.4
24	180.3	182.2	182.2	181.9	180.4	180.4	178.8	176.2	176.2	176.0	175.6	177.0
25	182.0	183.9	183.9	182.7	181.0	181.0	179.9	179.9	180.0	180.0	181.0	182.9
26	186.8	189.8	193.6	175.9	185.5	184.8	185.7	185.7	185.7	188.8	188.8	189.7
27	198.8	198.9	199.5	192.9	194.3	192.0	189.9	186.0	187.2	185.9	185.9	185.2
28	183.0	184.7	185.2	185.6	185.2	184.7	183.7	183.3	182.4	182.7	182.3	180.3
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	178.49	179.34	179.94	177.36	177.07	176.34	176.18	175.54	175.80	175.68	175.29	175.55
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
FEBRUARY.	°	°	°	°	°	°	°	°	°	°	°	°
2	35.6	35.4	35.0	35.0	35.6	36.2	37.0	37.9	38.5	39.0	39.8	39.8
3	42.6	42.8	43.2	43.9	44.0	44.5	45.2	45.1	45.9	46.7	47.6	47.8
4	46.6	46.6	49.0	47.5	48.4	48.6	48.6	48.6	48.6	48.8	47.6	48.0
5	48.6	48.1	48.8	49.4	50.3	50.4	50.4	50.6	50.6	51.0	51.0	50.7
6	49.4	49.1	48.6	48.7	48.9	49.3	49.5	50.0	50.5	51.0	51.3	51.3
7	49.0	48.6	48.8	48.4	49.0	49.8	50.1	50.3	50.0	49.7	49.9	49.6
8	—	—	—	—	—	—	—	—	—	—	—	—
9	33.8	33.8	34.2	34.4	35.2	35.0	34.9	34.5	34.7	35.1	35.4	36.1
10	33.8	33.6	33.6	33.6	33.7	34.0	34.8	35.6	36.5	37.2	37.6	37.4
11	40.2	41.4	41.0	41.1	41.1	41.9	42.6	43.0	43.0	42.8	43.2	43.4
12	40.0	39.5	40.0	40.0	40.2	40.4	40.8	41.3	41.6	42.6	42.6	42.5
13	43.3	43.1	43.4	43.4	43.5	44.0	45.0	45.6	46.1	47.0	47.6	47.6
14	46.8	45.4	44.8	43.5	43.6	44.3	44.6	45.6	46.0	46.9	47.0	46.7
15	—	—	—	—	—	—	—	—	—	—	—	—
16	42.0	42.3	42.3	42.2	43.6	44.0	44.4	44.6	44.6	44.6	44.8	44.6
17	43.8	43.6	43.4	43.9	44.4	45.5	46.2	46.6	46.6	47.0	47.4	47.0
18	44.7	43.9	44.7	44.8	45.4	45.8	46.6	46.8	47.0	47.4	47.6	47.8
19	42.4	41.8	41.3	41.2	41.6	41.8	42.6	43.0	43.0	43.0	42.9	42.4
20	41.4	41.6	41.3	41.5	41.5	42.1	42.7	42.8	43.4	44.6	45.0	45.7
21	46.8	46.6	46.6	46.6	46.8	48.0	48.5	48.8	48.5	48.2	48.4	47.8
22	—	—	—	—	—	—	—	—	—	—	—	—
23	38.2	37.8	37.6	40.6	39.6	39.8	40.4	40.6	40.6	41.0	41.4	41.2
24	39.4	39.2	39.4	38.8	38.9	39.4	40.7	41.5	42.2	42.6	42.6	42.2
25	39.8	38.8	38.8	38.6	39.0	39.2	39.8	40.5	40.6	41.0	41.5	41.1
26	37.2	36.3	36.8	44.0	37.9	37.8	38.0	38.0	38.0	38.1	38.0	37.3
27	31.2	30.5	31.0	34.1	32.1	33.1	34.6	36.5	37.6	38.2	38.3	38.1
28	40.0	39.5	38.4	38.3	38.5	39.4	40.0	40.0	40.1	40.6	40.8	41.0
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41.53	41.25	41.33	41.81	41.78	42.26	42.83	43.24	43.51	43.92	44.18	44.05

12^h.

Sc. Div.

183.1

168.0

169.7

163.7

164.2

165.9

165.9

191.3

186.7

177.0

179.9

169.5

173.9

178.5

171.5

170.3

180.3

171.3

169.4

178.3

177.3

192.4

189.7

185.0

181.9

176.60

39.8

47.8

47.8

50.4

50.9

49.4

35.6

37.4

43.0

42.2

47.7

46.6

44.4

46.8

47.6

41.7

46.1

47.6

41.0

38.3

41.0

43.85

VERTICAL FORCE.

One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'80.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
184'0	183'1	183'1	182'4	182'3	181'0	179'6	179'6	177'8	177'7	176'3	175'8	174'8	183'10	
168'3	167'6	167'6	166'7	166'7	167'6	167'6	167'6	168'8	168'8	168'0	167'7	168'8	170'15	
169'7	169'7	169'7	169'1	169'6	169'1	168'5	169'4	169'4	170'3	170'1	170'0	163'2	168'87	
162'5	164'0	164'0	164'0	164'8	163'8	163'8	164'1	163'8	163'8	163'8	164'2	165'3	164'25	
161'7	162'7	163'9	163'9	163'9	165'2	165'1	164'6	164'6	165'7	166'2	161'8	164'1	164'23	
165'6	165'6	165'9	166'9	169'5	170'9	171'3	—	—	—	—	—	—	—	
189'9	190'6	191'3	192'5	191'3	191'3	191'6	192'9	192'8	192'8	192'8	192'8	194'8	193'1	190'97
186'7	186'7	186'2	186'2	184'4	184'7	185'8	186'2	184'5	184'0	183'1	181'9	181'0	181'0	187'46
176'8	175'9	177'0	179'0	179'5	181'7	181'1	180'9	180'7	180'7	180'4	179'6	180'6	179'34	
177'3	178'6	179'9	181'3	181'3	181'3	181'3	181'3	178'4	179'9	179'2	178'9	176'3	175'4	180'15
169'5	169'5	169'5	171'6	170'0	167'9	172'2	171'4	169'7	170'7	170'6	170'8	168'3	170'9	171'75
169'2	171'0	173'9	174'8	172'8	174'7	173'1	170'9	—	—	—	—	—	—	
176'2	176'4	176'2	178'4	176'3	176'1	177'8	175'8	174'7	175'5	175'2	174'8	175'3	174'75	
170'6	170'6	171'5	171'5	172'4	172'4	172'2	172'2	170'5	170'5	172'9	172'9	173'0	171'75	
171'3	170'3	170'3	170'3	171'0	170'5	170'5	171'0	172'6	172'6	172'6	175'3	176'9	177'2	172'03
177'5	178'0	180'3	179'6	179'6	182'9	182'9	182'9	181'2	179'3	179'3	179'2	179'3	179'3	178'96
170'5	170'5	171'3	170'0	171'7	171'3	171'3	171'3	167'7	169'8	170'2	170'2	170'2	170'7	173'23
167'8	169'0	169'4	168'7	168'7	168'8	170'8	170'8	—	—	—	—	—	—	
178'3	178'4	178'3	178'3	178'3	179'6	179'6	179'3	180'5	180'0	180'0	180'3	180'3	180'3	179'54
175'6	177'0	177'3	179'4	179'4	179'0	179'5	179'5	180'3	180'3	180'3	181'3	182'0	181'6	179'46
181'0	182'9	192'4	192'4	198'2	193'1	186'5	184'6	184'0	181'9	182'1	181'3	182'6	181'7	184'37
188'8	189'7	189'7	190'3	190'3	190'9	190'0	187'6	188'0	189'1	189'8	191'4	191'6	195'8	188'55
185'9	185'2	185'0	182'7	180'5	179'7	181'4	180'5	180'3	179'4	179'0	179'7	181'5	182'1	186'18
182'3	180'3	181'9	181'8	181'8	180'9	181'5	181'5	193'6	191'2	191'2	190'5	190'5	193'8	185'14
175'29	175'55	176'60	176'76	176'75	176'81	176'91	176'50	177'37	176'85	177'19	177'83	177'80	178'14	177'00

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

39'8	39'8													
47'6	47'8	39'8	40'0	40'1	40'5	40'6	41'4	41'4	41'6	42'2	42'0	42'4	42'4	39'13
47'6	48'0	47'8	48'0	48'0	47'8	47'8	47'8	47'4	47'4	47'0	46'6	46'8	46'6	46'18
51'0	50'7	47'8	47'8	47'6	47'6	47'6	47'6	47'4	47'2	47'3	47'5	47'5	47'6	47'85
51'3	51'3	50'4	50'4	50'3	50'3	50'5	50'7	50'8	50'3	50'2	50'5	50'3	49'7	50'19
49'9	49'6	50'9	50'9	50'7	50'3	50'3	50'3	50'3	50'3	50'0	49'7	49'5	49'2	50'00
		49'4	49'4	49'0	48'3	47'5	46'6							
35'4	36'1							33'5	34'0	34'2	34'6	35'0	33'0	45'32
37'6	37'4	35'6	35'4	35'5	35'3	35'2	35'0	34'7	34'2	33'8	34'0	34'0	34'0	34'74
43'2	43'4	37'4	37'6	38'3	38'2	38'0	38'0	38'4	39'4	40'0	40'0	40'3	40'6	36'98
42'6	42'5	43'0	42'5	41'6	41'1	40'9	41'2	41'2	41'1	40'9	40'9	40'9	40'1	41'67
47'6	47'6	42'2	42'2	41'7	41'5	41'6	41'6	42'0	42'3	42'5	42'7	43'1	43'5	41'60
47'0	46'7	47'7	48'3	48'2	47'6	47'7	47'6	47'8	47'4	47'4	47'0	46'7	46'8	46'25
		46'6	46'5	45'9	45'8	45'6	45'3							
44'8	44'6							40'0	40'2	40'4	41'0	41'4	41'6	44'40
47'4	47'0	44'4	44'6	44'2	43'8	43'6	43'4	43'2	43'3	43'5	43'6	43'6	43'6	43'70
47'6	47'8	46'8	46'6	46'2	45'8	45'9	45'7	45'6	45'2	45'0	45'2	45'5	45'0	45'58
42'9	42'4	47'6	47'6	47'6	46'8	46'6	46'6	46'0	45'3	44'5	43'6	43'1	42'3	45'84
45'0	45'7	41'7	41'6	41'4	41'5	41'2	41'2	41'4	41'3	41'4	41'8	41'8	41'6	41'87
48'4	47'8	46'1	47'0	47'1	47'0	46'8	47'0	47'6	47'4	47'5	47'5	47'4	47'2	44'97
		47'6	47'8	47'4	47'2	47'0	47'0							
41'4	41'2							37'8	38'7	38'8	38'9	38'2	38'4	45'27
42'6	42'2	41'0	41'0	41'0	41'2	40'8	40'8	40'6	40'0	39'9	39'9	39'8	39'4	40'17
41'5	41'1	41'7	41'6	41'6	41'0	40'6	40'3	40'3	40'4	40'0	40'0	40'0	40'2	40'61
38'0	37'3	40'7	40'4	40'0	40'0	40'0	40'0	40'0	39'6	39'6	38'7	38'3	37'6	39'73
38'3	38'1	37'0	36'8	36'2	36'0	35'3	34'6	34'4	33'6	33'2	32'2	32'0	31'6	36'26
40'8	41'0	38'3	39'0	40'0	40'0	40'0	40'2	40'3	40'4	40'0	40'0	40'0	40'0	37'23
		41'0	41'0	41'0	41'0	40'9	40'6							
								34'6	34'2	34'2	33'9	33'6	33'6	38'59
44'18	44'05	43'85	43'92	43'77	43'57	43'42	43'35	41'95	41'87	41'81	41'74	41'72	41'48	42'67

VERTICAL FORCE.													
One Scale Division = 0.00083 parts of the V. F. Increase in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 80.													
Mean (Guthrie's) gen. Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
MARCH.	2	193'8	193'6	191'0	186'7	183'9	181'0	181'0	180'0	179'4	179'4	179'6	178'2
	3	182'2	183'5	182'2	180'6	176'2	173'5	172'1	171'5	170'3	170'9	171'4	170'0
	4	174'8	173'7	173'4	170'7	167'0	165'5	165'4	165'3	165'8	164'7	164'1	165'9
	5	166'6	166'6	165'0	163'3	161'9	158'8	157'5	158'5	160'1	159'7	157'9	157'6
	6	165'6	165'4	165'4	163'1	162'6	163'7	163'3	163'0	162'7	162'2	162'3	161'5
	7	172'6	173'6	173'1	171'2	168'6	167'7	167'7	166'8	168'8	169'5	169'5	170'6
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	167'0	167'3	168'0	166'8	162'6	159'8	160'4	161'1	160'6	160'0	160'0	159'5
	10	159'3	162'9	162'9	161'8	158'5	156'5	157'1	157'1	157'7	157'9	157'9	157'8
	11	166'2	166'3	163'4	163'8	156'7	153'9	153'2	154'3	156'1	157'0	155'7	154'7
	12	161'3	160'0	159'9	158'8	157'7	157'7	157'1	157'5	157'5	158'5	158'9	158'0
	13	155'1	150'2	146'7	148'4	148'6	149'8	151'3	157'0	158'2	158'8	162'1	168'7
	14	150'2	150'7	156'9	153'8	159'3	158'9	158'7	160'8	161'5	161'1	163'7	163'7
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	169'9	171'5	168'4	167'7	168'4	168'4	168'1	168'8	171'9	179'7	179'5	179'9
	17	168'8	159'6	162'3	167'2	169'8	170'7	172'2	169'6	171'7	173'5	174'4	167'5
	18	169'3	170'9	170'9	173'3	170'5	167'4	167'4	167'9	166'6	165'1	163'4	164'4
	19	156'7	155'5	159'7	159'3	158'6	156'3	155'0	154'9	153'9	154'3	155'4	156'6
	20	159'7	159'1	159'1	156'4	154'5	153'4	153'4	154'1	155'1	155'1	155'3	156'0
	21	160'2	160'2	162'1	161'6	162'3	161'8	161'8	161'8	163'7	164'0	162'5	162'5
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	169'9	169'9	168'0	161'2	166'9	159'0	158'1	157'1	158'3	158'9	159'3	159'3
	24	158'1	159'2	160'3	159'5	158'5	159'7	160'0	159'7	160'6	161'2	160'1	161'5
	25	162'4	162'4	162'4	160'8	159'2	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		166'32	165'98	165'94	161'91	163'70	162'17	162'04	162'34	163'18	163'52	163'65	163'69
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
MARCH.	2	34'0	34'2	35'0	36'6	38'2	38'7	40'0	40'6	41'0	41'6	41'8	42'0
	3	40'2	39'8	40'0	40'8	42'0	43'4	44'0	44'6	45'2	45'7	46'2	45'8
	4	44'6	44'0	44'6	45'6	47'3	48'1	48'2	48'0	48'1	48'8	49'2	49'1
	5	48'8	48'4	49'2	49'2	49'6	50'3	50'6	51'3	51'3	51'9	53'2	53'3
	6	49'7	49'3	49'2	49'5	49'5	49'1	49'6	49'7	49'9	50'5	50'8	50'5
	7	44'7	44'5	44'6	44'9	46'0	46'7	46'7	46'7	46'7	46'8	46'8	46'6
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	47'5	47'4	47'3	47'6	48'8	50'0	50'0	50'6	51'0	51'6	51'9	52'0
	10	50'6	49'4	49'6	50'3	51'5	52'3	52'6	52'4	52'4	52'7	53'1	53'3
	11	49'0	48'6	49'7	50'0	51'7	52'2	53'2	53'7	53'7	53'9	54'4	54'5
	12	51'5	51'6	51'5	51'8	52'6	52'8	53'0	53'1	53'5	53'6	53'5	53'7
	13	54'6	54'6	54'4	54'0	54'0	54'3	54'6	55'2	55'2	55'0	54'6	55'3
	14	54'9	54'5	54'1	54'3	54'3	54'5	54'5	54'7	54'7	55'1	54'8	54'3
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	46'8	46'8	47'2	46'7	46'8	46'7	46'9	47'0	47'4	47'6	47'6	47'6
	17	45'4	44'3	44'1	43'7	43'6	43'9	44'2	45'5	45'8	47'0	48'2	49'4
	18	44'9	44'6	44'6	45'0	45'9	47'2	47'7	48'2	48'7	50'4	51'1	51'1
	19	53'3	53'3	53'1	53'4	54'1	54'3	54'9	55'5	55'6	56'1	56'2	56'0
	20	53'2	52'5	52'6	53'6	54'1	54'6	55'0	55'5	55'7	56'5	56'4	56'3
	21	52'7	52'3	51'5	51'1	50'6	50'6	50'3	50'2	50'2	50'4	51'1	51'7
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	47'4	47'5	48'2	48'9	50'0	50'6	51'2	51'5	51'7	53'0	52'4	52'2
	24	52'0	52'0	51'9	51'8	51'6	51'5	51'8	51'9	52'0	52'0	52'0	51'8
	25	51'7	51'2	50'8	50'6	50'7	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		48'29	47'98	48'12	48'44	49'11	49'59	49'95	50'29	50'49	51'01	51'27	51'33

* Three minutes late.

* This day not included in the Sums and Means.

One Scale Division = '000065 parts of the V. P. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 80

①

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
1	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—
3	225'9	225'9	222'9	220'9	215'5	214'5	214'7	216'1	216'9	216'9	218'0	218'9
4	221'6	221'2	221'2	216'0	212'7	211'3	213'2	212'9	215'3	216'2	214'0	213'5
5	—	—	—	—	—	—	—	—	—	—	—	—
6	214'5	207'0	202'2	204'9	208'3	210'5	220'4	223'7	230'4	240'1	250'3	236'1
7	214'5	216'6	217'5	216'8	217'2	215'8	215'8	216'2	217'4	218'7	219'5	218'7
8	219'4	219'2	219'3	218'1	217'0	217'1	217'1	218'1	222'3	220'3	220'1	219'4
9	226'4	224'6	223'1	223'1	219'0	218'9	219'1	218'5	218'8	218'8	218'8	217'5
10	—	—	—	—	—	—	—	—	—	—	—	—
11	226'6	226'9	226'9	225'1	224'8	221'7	221'7	221'9	221'7	221'0	221'0	224'2
12	—	—	—	—	—	—	—	—	—	—	—	—
13	228'6	228'9	229'2	229'2	225'6	226'2	227'3	228'2	231'8	234'7	234'0	232'1
14	231'5	224'5	221'6	222'3	221'5	221'8	221'8	221'8	229'3	225'7	231'3	231'3
15	224'2	224'5	224'6	223'6	221'9	221'9	221'9	223'6	224'4	224'4	228'5	230'4
16	209'0	217'2	216'2	216'4	221'4	223'0	229'3	233'5	236'2	238'1	237'8	235'5
17	222'9	223'9	223'9	220'4	219'5	218'3	219'9	218'4	217'9	220'1	219'6	215'6
18	217'4	216'1	216'1	214'7	214'3	212'9	212'9	212'8	212'8	211'2	210'2	209'3
19	—	—	—	—	—	—	—	—	—	—	—	—
20	223'6	222'4	219'5	218'0	214'4	212'5	211'1	212'5	213'5	213'5	213'5	213'5
21	210'8	210'8	209'2	207'4	204'0	202'1	200'4 ^b	200'4	200'4	200'3	201'0	200'4
22	202'2	203'3	203'3	205'2	203'7	204'7	205'0	204'5	204'7	206'3	206'4	207'6
23	202'8	202'7	203'7	202'7	202'1	200'6	199'6	199'4	200'6	202'7	203'5	203'1
24	203'1	202'2	202'5	202'7	203'3	202'9	203'2	203'2	202'5	203'0	202'9	202'7
25	201'4	203'8	203'8	203'7	204'5	205'7	204'8	204'6	208'7	209'6	208'6	215'6
26	—	—	—	—	—	—	—	—	—	—	—	—
27	218'8	216'3	213'5	211'0	208'2	208'1	207'7	208'8	208'8	207'9	208'5	205'4
28	209'4	208'2	207'6	206'6	206'8	204'6	203'7	203'9	203'9	205'1	204'3	206'3
29	210'3	210'3	209'9	209'3	208'0	207'4	208'8	207'6	208'6	208'6	209'8	209'8
30	208'6	209'5	207'6	207'3	206'3	203'0	201'7	201'5	201'8	203'9	202'6	201'9
Hourly Means	216'24	215'91	215'01	214'15	213'04	212'43	213'08	213'57	215'16	216'09	216'70	215'89
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
1	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—
3	47'6	48'2	49'6	49'6	51'0	51'3	52'0	52'4	52'4	52'8	53'6	53'6
4	50'3	50'6	50'2	52'2	52'4	53'2	53'5	51'3	54'2	54'6	55'3	55'6
5	—	—	—	—	—	—	—	—	—	—	—	—
6	54'1	53'4	53'5	53'6	54'6	55'3	55'5	55'8	56'1	56'5	56'7	57'1
7	55'0	54'5	54'2	54'5	54'7	55'2	56'6	56'3	56'4	56'6	56'6	56'3
8	52'5	52'5	53'0	52'9	52'7	52'6	52'9	52'7	52'7	52'7	52'6	53'3
9	49'2	49'5	50'3	51'0	51'8	52'2	52'1	52'4	52'6	53'2	53'6	53'6
10	—	—	—	—	—	—	—	—	—	—	—	—
11	48'5	48'3	47'7	48'5	49'4	49'9	51'0	52'1	51'9	52'5	52'4	51'8
12	—	—	—	—	—	—	—	—	—	—	—	—
13	41'2	41'3	41'3	41'7	45'4	45'8	45'6	45'1	45'0	45'7	46'2	46'6
14	41'4	46'0	46'8	47'0	47'1	47'5	47'4	47'6	47'8	48'6	49'1	49'0
15	48'3	48'4	48'1	48'7	49'0	48'5	48'8	48'8	48'8	49'3	49'8	50'2
16	47'2	47'6	48'7	49'0	49'6	49'8	49'9	50'1	50'5	51'0	51'3	51'5
17	50'0	50'3	50'8	51'6	53'1	54'3	54'8	55'3	55'6	56'0	56'3	56'7
18	53'5	54'0	54'0	54'4	55'1	55'5	55'7	56'3	56'3	57'2	57'3	58'2
19	—	—	—	—	—	—	—	—	—	—	—	—
20	50'7	51'3	52'9	52'6	54'1	55'2	55'3	56'0	56'3	57'0	57'5	58'2
21	57'1	57'0	57'2	58'2	59'3	60'0	60'0	61'0	62'0	62'5	62'5	62'2
22	59'0	59'2	59'0	58'7	58'5	58'5	58'5	59'1	59'2	59'3	59'4	59'6
23	60'1	59'7	59'0	59'2	60'0	60'0	60'4	60'4	60'3	60'5	61'0	60'0
24	59'6	59'4	59'3	59'4	59'4	59'8	60'2	60'2	61'0	60'8	60'8	60'8
25	59'8	59'4	59'2	58'8	58'3	58'3	58'3	59'2	59'0	58'5	58'4	58'4
26	—	—	—	—	—	—	—	—	—	—	—	—
27	51'3	52'3	53'7	54'3	55'8	56'3	56'5	57'1	57'5	57'6	58'5	59'3
28	56'3	57'2	57'8	57'7	58'3	58'4	59'0	59'2	59'2	59'2	59'0	59'2
29	57'2	57'5	57'0	56'6	57'1	57'3	57'3	57'5	57'5	57'5	57'3	56'8
30	57'2	57'2	57'3	58'0	58'5	59'0	59'2	59'5	60'0	60'1	60'0	60'5
Hourly Means	52'71	52'95	53'20	53'53	54'14	54'52	54'80	55'15	55'32	55'63	55'88	56'02

* Not included in the Means.

* Two minutes late.

ture, 1° 64.

10h.	11h.
Sc. Div.	Sc. Div.
218°0	218°9
216°2	215°6
214°0	213°5
250°3	236°1
219°5	218°7
220°1	219°4
218°8	217°5
224°0	224°2
234°0	232°1
231°3	231°3
228°5	230°4
237°8	235°5
219°6	215°6
210°2	209°3
213°5	213°5
201°0	200°4
206°4	207°6
203°5	203°1
202°9	202°7
208°6	215°6
208°5	205°4
204°3	206°3
208°6	208°8
202°6	201°9
216°70	215°89

VERTICAL FORCE.
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
218°9	218°9	220°5	219°9	220°9	219°8	221°1	223°1	214°1	217°9	222°5	225°4	—
216°1	215°8	215°5	216°4	218°9	219°2	220°7	220°7	221°3	221°9	221°6	221°6	218°82
212°1	214°4	214°4	215°2	214°6	215°3	—	—	—	—	—	—	215°05
227°7	224°5	224°5	223°3	221°3	221°3	212°4	212°5	215°6	215°6	215°6	214°5	218°91
218°7	215°7	215°7	215°4	214°3	206°0	210°0	214°5	217°5	207°3	198°9	214°6	214°60
219°4	218°5	218°9	218°5	219°8	219°5	206°1	211°1	209°3	207°0	207°0	219°4	219°89
218°5	218°4	218°2	218°4	220°7	220°7	219°1	218°4	223°8	223°8	223°8	226°4	221°55
224°2	224°4	224°0	223°0	223°0	223°0	219°5	218°2	225°8	228°3	228°3	225°5	225°86
229°3	234°3	230°6	225°4	227°5	232°4	231°1	232°9	232°6	231°0	231°0	231°0	230°37
231°1	231°1	226°9	226°6	223°7	224°3	232°3	231°9	231°9	231°3	233°7	232°4	225°13
230°4	223°6	228°1	227°1	223°7	223°5	209°8	—	205°6	205°1	201°6	203°1	220°80
236°5	235°9	232°8	225°6	210°1	211°2	214°0	206°2	—	197°1	215°4	221°3	222°60
213°1	213°4	213°4	212°7	212°7	212°7	212°1	213°8	213°8	214°0	212°7	214°2	216°63
209°3	211°1	211°1	210°6	210°6	210°6	—	—	—	—	—	—	213°59
213°5	211°5	209°5	209°5	209°5	209°5	206°5	215°6	219°3	219°3	219°3	222°1	212°90
200°4	200°4	200°2	200°2	200°6	200°2	195°4	204°7	204°4	204°1	201°0	206°3	202°84
209°4	209°1	202°5	200°3	200°6	203°1	203°3	203°7	204°2	204°4	204°5	201°7	204°32
203°1	200°9	201°5	202°6	202°8	202°8	203°6	203°7	203°7	202°5	201°2	201°2	202°46
201°2	202°6	202°6	202°6	200°6	202°8	220°3	193°9	188°0	193°7	193°5	202°7	200°78
215°6	213°4	213°3	213°3	198°7	208°6	—	—	—	—	—	—	209°65
—	—	—	—	—	—	212°6	213°7	215°7	216°3	218°0	217°6	208°03
204°5	204°3	204°5	206°1	204°0	202°5	205°8	206°7	206°7	206°0	209°3	209°3	206°43
205°6	206°7	206°7	206°6	206°5	206°6	206°6	205°6	205°8	208°4	208°4	210°3	208°93
209°8	209°8	209°8	210°6	210°4	209°0	209°1	205°5	206°6	208°6	207°5	210°4	208°93
201°0	201°0	201°5	201°5	201°5	201°0	201°5	200°8	200°6	200°6	202°6	202°5	202°99
215°24	214°82	214°18	213°54	212°00	212°43	212°3	212°05	213°03	211°98	212°93	214°95	214°02

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

°	°	°	°	°	°	°	°	°	°	°	°	°
52°3	52°3	52°2	51°7	51°0	51°0	50°5	50°3	49°7	49°0	48°8	48°4	48°2
53°6	53°6	51°3	51°8	51°2	53°4	52°5	52°0	51°7	51°6	51°3	51°2	51°0
55°3	55°6	55°7	55°5	53°3	53°0	55°1	54°7	—	—	—	—	—
—	—	—	—	—	—	—	—	54°0	54°0	54°1	54°1	54°2
56°7	57°1	56°7	58°0	58°0	56°5	56°0	55°5	55°3	55°4	55°2	55°2	55°3
56°6	56°3	56°3	56°8	56°9	56°8	56°6	56°5	56°2	55°6	55°5	54°5	53°4
52°6	53°3	54°0	53°5	52°9	51°8	51°6	51°5	51°0	50°5	50°2	50°0	49°5
53°6	53°6	53°0	53°2	53°3	52°5	51°7	51°5	—	—	—	—	—
—	—	—	—	—	—	—	—	46°8	47°5	47°5	47°7	48°0
52°4	51°8	51°4	50°9	50°8	50°6	50°3	50°0	—	—	—	—	—
—	—	—	—	—	—	—	—	44°6	44°5	44°4	44°3	44°4
46°2	46°6	46°6	46°6	45°8	45°4	45°2	44°6	44°6	44°2	44°0	44°0	44°3
49°1	49°0	49°0	48°8	49°2	49°0	49°2	49°0	48°8	48°4	48°6	48°8	47°6
49°8	50°2	50°5	51°0	51°2	51°3	50°5	49°7	49°5	—	49°3	48°3	47°5
51°3	51°5	51°9	52°8	52°7	52°3	51°7	51°6	51°5	51°2	—	50°8	50°2
56°3	56°7	56°6	56°8	56°3	56°6	56°2	56°0	55°8	55°5	54°7	54°6	54°0
57°3	58°2	58°3	58°3	58°2	57°8	57°6	57°4	—	—	—	—	—
—	—	—	—	—	—	—	—	53°3	52°3	52°0	51°8	51°4
57°5	58°2	58°0	58°5	58°5	58°2	57°8	57°6	57°5	57°8	57°7	57°5	57°2
62°5	62°2	62°4	62°0	62°2	62°0	61°8	61°8	61°0	60°6	60°1	59°8	59°6
59°4	59°6	60°0	60°0	61°1	61°1	60°6	60°2	60°0	59°2	59°4	60°6	60°6
61°0	60°0	60°8	60°2	60°4	60°2	60°0	59°8	59°6	59°7	59°6	59°8	59°7
60°8	60°8	60°9	60°8	60°8	60°8	60°6	60°5	60°3	60°4	60°2	60°4	60°0
58°4	58°4	57°8	57°6	57°3	57°2	57°0	56°6	—	—	—	—	—
—	—	—	—	—	—	—	—	53°0	52°5	52°2	51°7	51°1
58°5	59°3	59°4	59°5	59°4	59°1	58°7	58°1	57°7	57°1	56°6	56°9	56°2
59°0	59°2	59°0	59°2	59°0	58°3	58°1	58°1	58°1	58°1	57°7	57°4	57°0
57°3	56°8	57°0	57°0	57°2	57°4	57°4	57°3	57°2	57°3	57°2	57°3	57°5
60°0	60°5	60°5	60°5	60°5	60°5	60°7	60°7	61°0	60°4	60°2	60°0	59°6
55°88	56°02	56°05	56°16	56°15	55°85	55°53	55°28	54°33	54°35	54°02	53°76	53°66
—	—	—	—	—	—	—	—	—	—	—	—	53°42
—	—	—	—	—	—	—	—	—	—	—	—	54°69

* Three minutes late.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MAY.	1	204'2	203'4	201'8	200'0	198'8	198'8	199'5	199'5	200'2	200'4	201'3
	2	199'5	200'0	200'4	197'6	196'5	195'6	195'6	196'6	199'8	198'8	198'8
	3	—	—	—	—	—	—	—	—	—	—	—
	4	203'6	203'4	201'9	198'6	203'2	204'4	202'3	201'9	203'1	209'3	220'5
	5	204'2	202'3	199'3	199'3	199'3	201'2	202'2	202'8	205'8	207'1	209'2
	6	203'6	203'6	202'3	200'0	197'0	199'2	199'7	199'7	203'9	206'0	203'0
	7	207'4	206'9	206'0	206'0	204'1	202'8	204'9	204'9	205'2	207'3	203'3
	8	204'0	203'9	203'0	200'6	199'0	199'3	198'7	198'7	201'3	202'4	204'3
	9	201'2	201'2	199'5	199'2	199'8	202'4	197'7	202'4	209'6	214'6	216'0
	10	—	—	—	—	—	—	—	—	—	—	—
	11	209'8	209'7	211'4	215'2	214'8	215'6	215'1	216'3	218'3	218'3	217'8
	12	206'2	206'9	211'0	211'0	212'2	211'5	215'3	225'0	233'5	246'3	244'3
	13	201'7	205'2	209'7	210'7	210'7	211'9	211'6	211'6	210'3	213'8	207'6
	14	199'9	199'0	199'4	198'1	196'8	198'4	198'4	198'4	197'4	195'8	195'9
	15	196'0	199'4	199'4	199'4	198'4	198'4	195'4	197'0	197'0	196'3	195'6
	16	205'6	205'4	203'7	202'1	198'3	195'2	194'3	194'5	194'5	195'6	196'2
	17	—	—	—	—	—	—	—	—	—	—	—
	18	199'4	199'0	198'8	199'4	195'1	193'9	193'1	194'6	197'9	198'5	199'1
	19	215'8	213'1	210'3	207'0	206'6	206'6	206'7	209'1	209'1	209'4	209'4
	20	205'1	206'1	205'4	203'2	203'2	204'1	204'1	204'1	208'5	203'6	203'6
	21	194'9	200'2	199'0	199'0	205'4	206'2	206'0	206'0	211'0	209'2	208'1
	22	210'4	204'3	205'3	205'8	204'5	204'1	204'2	204'4	205'7	207'0	207'0
	23	210'7	208'5	204'0	203'2	199'8	203'8	203'8	200'7	200'8	200'8	199'2
	24	—	—	—	—	—	—	—	—	—	—	—
	25	193'7	194'5	191'0	193'3	193'0	193'0	193'4	194'4	194'4	196'7	194'6
	26	192'9	191'9	188'5	188'5	186'3	186'1	184'0	180'7	179'1	180'6	182'0
	27	186'8	181'5	183'0	182'7	178'3	176'9	177'5	178'4	178'9	178'9	177'5
	28	184'3	182'9	180'9	179'5	178'3	177'2	178'1	178'1	178'9	179'4	179'7
	29	187'0	185'7	183'8	182'7	182'7	178'0	178'3	178'3	178'3	178'3	179'1
	30	181'5	183'0	184'5	184'3	182'6	179'1	177'2	177'7	179'6	183'2	185'9
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	200'36	199'77	199'36	198'71	197'92	197'77	197'58	198'30	200'12	200'36	201'53	201'82
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
MAY.	1	59'5	59'6	59'8	60'0	60'2	60'3	60'4	60'4	60'8	61'0	61'2
	2	60'6	60'6	61'0	61'5	62'1	62'6	63'0	63'6	63'8	64'3	64'4
	3	—	—	—	—	—	—	—	—	—	—	—
	4	59'0	59'4	60'0	61'2	62'0	63'0	63'3	63'2	63'6	64'0	64'4
	5	60'8	60'8	61'0	60'6	61'0	61'4	61'6	61'6	61'6	62'3	62'5
	6	61'6	61'6	61'0	61'6	62'0	62'3	62'4	62'0	61'6	62'0	62'1
	7	57'7	58'5	58'7	58'9	59'1	59'6	59'8	60'0	60'0	60'0	60'2
	8	58'8	60'0	60'4	60'8	61'6	62'0	62'6	62'4	62'8	63'8	63'4
	9	61'4	61'2	61'0	61'0	61'0	61'2	61'5	61'4	61'4	61'0	61'0
	10	—	—	—	—	—	—	—	—	—	—	—
	11	52'7	52'7	52'8	52'1	51'8	52'3	52'5	52'7	53'0	53'3	54'0
	12	54'2	54'8	55'7	56'5	57'0	57'5	57'7	58'0	58'4	58'9	59'5
	13	56'9	56'9	56'7	57'2	58'1	59'0	59'3	59'6	60'0	61'0	61'6
	14	61'6	61'6	62'1	63'0	63'6	64'4	64'6	64'8	65'2	65'6	65'9
	15	63'0	62'4	62'0	62'0	62'0	62'2	62'8	63'3	63'4	63'7	64'0
	16	59'7	59'6	59'7	60'0	61'0	62'0	62'4	63'0	63'4	63'9	64'4
	17	—	—	—	—	—	—	—	—	—	—	—
	18	62'7	62'3	61'6	61'9	61'6	61'6	61'2	61'0	61'4	61'0	60'7
	19	55'6	56'3	56'7	57'3	57'8	58'3	58'0	58'2	58'2	58'8	59'3
	20	56'3	57'0	58'1	58'4	59'0	59'3	59'7	61'0	61'4	61'6	61'6
	21	58'3	59'0	59'2	59'4	59'4	59'5	59'5	59'4	59'3	59'3	59'3
	22	54'8	55'8	56'6	57'0	58'5	59'0	59'2	59'8	59'9	60'0	60'0
	23	57'3	57'4	58'6	59'2	59'8	60'6	61'0	61'1	61'9	62'9	63'4
	24	—	—	—	—	—	—	—	—	—	—	—
	25	61'4	61'6	62'0	62'6	63'4	64'5	65'1	66'0	66'3	66'6	67'0
	26	65'6	66'4	67'0	67'5	68'7	69'3	69'8	70'3	71'0	71'6	72'8
	27	68'8	69'6	70'0	70'8	71'7	72'4	72'6	72'7	73'1	73'6	73'8
	28	69'4	70'0	70'5	71'0	71'3	71'3	71'3	71'5	72'1	72'2	71'8
	29	69'1	69'2	69'7	70'1	70'3	70'7	70'9	71'0	71'5	71'9	71'9
	30	70'0	69'0	68'5	68'7	68'9	69'5	69'9	70'7	71'3	71'5	72'0
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	60'65	60'90	61'17	61'55	62'03	62'52	62'75	62'98	63'31	63'68	63'93	64'07

re, 1° 64.

10h.	11h.
Sc. Div.	Sc. Div.
200°4	201°3
198°7	198°8
220°5	222°2
209°2	210°2
203°0	204°2
203°3	205°3
204°3	205°1
216°0	210°2
217°8	218°7
216°3	214°3
207°6	205°2
195°8	195°9
195°6	197°9
196°2	195°3
199°1	200°2
209°4	207°6
203°6	203°6
208°1	206°6
207°0	207°0
199°2	198°4
194°6	194°6
182°0	183°0
177°5	178°4
179°7	180°3
179°1	181°4
185°9	191°6
201°53	201°82

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
201°2	201°5	200°8	200°7	200°7	201°2	198°9	199°3	199°2	199°2	199°2	199°2	200°39
196°5	196°3	196°1	193°9	193°3	193°3	—	—	—	—	—	—	196°15
209°0	209°2	195°7	205°6	175°0	185°4	177°7	189°0	195°2	195°2	200°7	202°6	200°42
210°2	208°9	205°5	205°5	203°9	192°9	193°9	194°9	194°7	197°8	198°7	201°3	202°13
201°9	201°5	200°5	199°5	199°6	199°1	201°6	202°5	201°4	201°4	204°5	204°5	201°68
209°2	209°2	205°5	201°2	203°5	202°0	203°6	196°3	198°8	203°2	206°0	206°0	204°52
206°5	204°4	202°1	201°7	201°2	199°0	198°9	200°1	200°1	200°3	200°9	200°7	201°51
207°0	204°9	202°3	200°6	200°6	200°1	—	—	—	—	—	—	205°15
218°7	218°7	223°7	225°4	214°5	202°7	216°0	208°0	209°2	210°3	209°6	209°6	211°67
219°4	214°0	207°5	208°2	194°5	199°6	212°3	198°2	207°5	209°4	207°4	195°7	212°64
205°2	204°2	204°2	193°4	191°7	191°7	191°7	197°9	200°4	200°4	201°3	199°5	203°82
199°0	196°9	195°7	196°0	193°6	193°8	192°9	193°2	193°2	195°9	195°9	195°9	196°32
197°1	196°4	198°2	198°9	198°9	198°9	198°9	200°2	200°2	200°9	201°7	204°0	198°52
194°6	194°6	195°4	195°4	197°3	197°5	—	—	—	—	—	—	199°56
200°5	198°8	203°3	209°5	208°5	208°3	203°1	205°7	204°6	206°3	212°6	215°4	201°90
204°7	204°7	204°7	206°3	209°4	205°6	193°4	202°7	207°2	204°3	196°3	208°4	206°60
203°6	201°4	201°4	201°8	200°8	198°2	198°6	200°8	202°2	203°4	205°9	202°9	203°15
204°9	205°6	206°4	206°9	206°9	206°9	208°9	207°0	204°3	202°9	200°2	203°1	204°82
206°3	206°3	206°3	206°3	206°3	206°3	206°0	206°2	206°2	206°2	195°6	206°7	205°60
197°2	196°6	196°6	204°6	210°3	209°7	—	—	—	—	—	—	200°92
194°6	192°6	190°2	190°1	190°9	190°9	190°3	190°3	190°5	191°1	192°7	192°3	192°63
181°9	181°9	182°4	182°7	182°3	181°0	183°1	182°9	182°9	182°9	182°7	186°8	184°05
177°5	177°0	177°0	177°0	177°9	177°3	177°6	180°0	180°9	179°4	180°0	178°7	179°25
180°3	180°3	180°3	180°2	180°3	181°7	182°5	183°4	184°2	183°9	185°2	187°7	181°15
182°5	182°7	182°9	179°9	174°3	177°1	174°4	179°2	182°1	180°6	174°3	176°1	179°99
185°6	185°5	185°7	190°9	167°9	167°6	—	—	—	—	—	—	181°32
170°2	180°0	185°0	180°4	181°9	180°9	—	—	—	—	—	—	—
199°81	199°00	198°09	198°28	195°54	194°92	194°48	196°10	197°68	197°48	197°02	197°24	198°30

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

61°0	61°2	61°2	61°3	61°3	61°1	61°0	61°0	61°2	61°4	61°3	61°2	61°0	60°8	60°75
64°6	61°4	61°6	61°6	61°4	61°5	61°6	61°6	—	—	—	—	—	—	62°85
—	—	—	—	—	—	—	—	63°4	62°7	61°7	61°2	60°5	59°6	62°85
61°4	65°2	65°6	65°6	65°8	65°8	65°2	66°6	61°7	63°6	62°8	62°0	61°6	61°5	63°33
62°5	62°6	62°6	62°8	62°6	62°8	62°6	62°4	62°0	61°8	61°8	61°6	61°4	61°2	61°80
62°1	62°2	62°2	61°7	61°7	61°6	61°6	60°8	60°4	60°0	59°6	59°2	58°5	58°2	61°19
60°2	60°4	60°4	60°7	60°7	60°7	60°0	59°8	59°7	59°0	58°8	58°7	58°9	58°7	59°52
63°4	63°0	63°0	62°8	62°8	62°6	62°6	62°4	62°6	62°2	62°2	62°0	61°9	62°0	62°11
61°0	61°0	61°0	61°0	61°4	61°4	61°5	61°6	—	—	—	—	—	—	59°92
—	—	—	—	—	—	—	—	57°3	56°8	56°2	55°7	55°3	54°7	59°92
54°0	54°3	55°0	54°9	54°8	54°8	54°8	54°8	54°4	54°0	54°0	54°0	54°0	53°8	53°65
59°5	59°6	60°4	60°6	61°8	61°8	61°2	60°4	59°4	59°2	58°8	57°8	57°5	57°4	58°50
61°6	62°0	62°8	62°8	63°0	62°6	62°4	62°0	62°0	62°4	62°2	62°2	62°0	61°7	60°68
65°9	65°8	66°0	65°8	65°6	65°4	65°3	65°0	64°8	64°6	64°5	64°5	64°5	63°6	64°49
64°0	64°0	64°6	64°2	63°8	63°1	62°6	62°0	61°8	61°6	61°2	60°7	60°5	60°0	62°54
64°4	64°2	64°6	64°6	64°4	64°2	63°8	63°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	64°2	64°4	63°8	63°4	63°8	63°3	62°97
60°7	60°5	60°4	60°0	59°7	59°5	59°0	58°8	58°2	57°4	56°7	56°0	55°8	55°3	59°76
59°3	59°7	59°7	59°5	59°6	59°2	58°5	58°2	57°8	57°5	57°3	57°6	57°5	56°0	58°02
61°6	61°6	62°2	62°0	61°8	61°8	61°6	61°2	60°6	60°2	59°7	59°3	58°8	57°5	59°96
59°3	60°0	60°0	59°6	59°4	58°6	58°3	58°0	57°5	57°0	56°4	55°8	55°4	54°8	58°43
60°0	60°0	59°8	59°6	59°3	58°9	58°7	58°7	58°6	58°5	57°8	57°6	57°4	57°7	58°47
63°4	63°6	63°6	63°6	63°8	63°6	63°5	63°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	62°6	62°4	62°2	62°0	61°6	61°2	61°68
67°0	67°3	67°2	67°3	67°8	67°8	67°4	67°2	66°8	67°2	66°6	66°6	66°1	65°6	65°72
72°8	73°0	73°0	72°6	71°5	71°5	71°0	70°5	70°1	69°9	69°6	69°2	68°6	68°6	70°15
73°8	74°3	74°5	74°7	74°3	74°2	73°6	73°6	73°1	72°0	71°4	71°0	70°2	69°4	72°31
71°8	71°8	71°8	71°9	72°1	72°1	71°6	71°1	70°8	70°4	70°2	70°0	69°4	68°3	70°99
71°9	71°5	71°3	70°8	70°5	70°9	72°3	72°3	72°3	72°3	70°8	70°5	71°5	71°2	71°02
72°0	72°6	72°6	72°6	72°2	72°3	72°0	71°5	—	—	—	—	—	—	70°84
—	—	—	—	—	—	—	—	71°5	71°5	71°2	70°5	70°2	69°4	—
63°93	64°07	64°24	64°17	64°15	63°95	63°74	63°53	63°01	62°70	62°27	61°95	61°71	61°21	62°76

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
Mean Guttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JUNE.	1	Sc. Div. 183'9	Sc. Div. 183'0	Sc. Div. 183'6	Sc. Div. 185'5	Sc. Div. 184'4	Sc. Div. 184'2	Sc. Div. 182'4	Sc. Div. 183'1	Sc. Div. 183'0	Sc. Div. 183'3	Sc. Div. 182'9	Sc. Div. 184'0
	2	181'9	184'9	184'9	184'9	183'2	182'9	184'4	185'7	189'7	195'1	196'7	198'0
	3	192'6	192'1	191'3	190'4	190'4	188'7	187'3	180'6	193'7	193'4	192'8	194'1
	4	187'7	187'1	186'2	186'2	186'7	185'7	185'7	186'5	190'8	190'1	190'1	189'9
	5	189'3	188'2	189'8	190'2	190'9	193'5	195'7	194'9	194'8	194'3	196'2	196'2
	6	200'9	200'8	198'6	195'8	194'3	195'0	195'0	196'5	199'8	194'4	188'7	190'3
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	207'8	205'2	204'1	200'1	196'0	195'2	195'0	195'9	195'8	195'7	195'0	194'0
	9	197'8	197'1	196'3	199'7	195'5	194'3	195'6	196'2	195'9	194'9	195'7	195'7
	10	199'8	198'7	197'3	195'7	195'6	197'2	194'1	192'7	192'0	191'6	191'2	191'1
	11	192'5	192'0	191'5	190'4	188'0	186'7	185'3	186'1	187'8	187'8	187'7	187'8
	12	193'7	192'8	190'7	189'1	188'1	188'1	189'0	190'4	191'2	191'0	192'2	191'9
	13	195'1	192'1	186'8	187'8	186'7	185'2	184'2	184'3	186'6	189'0	190'4	190'4
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	181'4	184'7	187'4	188'9	183'4	181'9	186'1	186'1	184'9	186'8	187'5	184'7
	16	178'8	174'4	181'5	179'1	186'7	183'4	182'7	184'5	184'3	187'7	190'0	188'0
	17	183'8	186'2	185'4	186'8	186'8	184'2	187'0	183'5	183'5	182'7	182'7	181'3
	18	181'0	182'6	183'2	183'5	182'0	182'2	180'0	180'0	180'0	182'3	181'5	179'0
	19	180'0	179'7	181'0	180'3	179'9	178'9	176'5	176'8	177'0	176'2	175'4	174'1
	20	183'3	183'3	184'5	184'5	184'8	183'8	183'0	182'9	184'1	186'3	186'9	186'9
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	201'2	203'4	202'5	201'8	197'4	198'4	196'7	195'4	194'8	195'5	196'2	199'0
	23	199'2	196'0	196'7	194'1	193'9	193'0	192'5	191'2	192'9	192'3	193'2	190'0
	24	185'7	187'4	187'4	187'4	186'7	184'0	182'6	182'2	184'3	183'9	184'5	182'6
	25	179'8	182'5	181'8	178'3	179'4	175'7	175'2	176'5	174'8	173'5	174'7	174'7
	26	182'4	182'8	181'7	181'0	178'2	175'0	173'3	171'1	171'9	173'7	173'7	174'2
	27	180'4	180'4	180'6	178'9	175'8	172'5	171'4	170'0	171'6	173'5	177'5	179'6
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	180'9	179'9	180'5	180'5	179'4	179'4	178'1	175'6	176'9	179'6	176'4	175'3
	30	169'3	172'5	174'5	173'4	170'9	167'2	168'3	167'0	168'7	168'7	168'7	170'0
Hourly Means	188'08	188'07	188'07	187'47	186'35	185'24	184'89	184'45	185'80	186'36	186'48	186'26	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
JUNE.	1	68'7	69'4	69'7	69'3	69'3	69'5	69'8	70'3	70'5	71'2	71'5	71'8
	2	69'0	69'0	68'7	69'2	69'5	69'4	69'6	69'6	69'6	69'5	69'5	69'8
	3	67'7	66'0	66'2	66'6	67'0	67'0	67'2	67'1	67'2	67'6	67'9	68'2
	4	66'4	66'8	67'4	67'4	67'4	67'6	68'0	68'7	69'0	68'7	68'7	68'2
	5	65'4	65'2	64'8	64'4	64'0	64'0	63'9	64'2	64'5	64'6	64'7	64'8
	6	61'0	61'4	61'8	62'4	62'8	62'8	62'8	62'8	63'0	63'2	63'3	63'6
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	59'3	59'5	59'7	60'6	61'6	62'8	63'7	63'4	63'7	64'3	64'8	65'5
	9	61'0	61'0	61'1	61'8	63'6	64'2	64'6	65'0	65'4	66'0	66'6	66'6
	10	63'4	63'6	64'3	64'6	65'3	65'8	66'3	66'6	67'4	68'6	69'2	69'5
	11	65'6	65'5	66'0	66'6	67'3	67'6	67'8	68'0	67'7	68'0	68'2	68'4
	12	63'6	64'3	64'6	65'1	65'4	65'7	66'0	66'0	66'0	66'0	66'0	66'4
	13	63'4	63'5	64'0	64'0	64'4	65'0	66'4	66'8	67'0	67'2	67'4	67'2
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	66'6	66'6	66'6	67'4	68'8	69'5	70'0	70'5	70'9	71'6	72'2	72'6
	16	69'4	69'6	69'5	70'3	70'5	70'6	70'5	70'5	70'5	70'7	70'7	71'0
	17	67'6	67'6	68'0	68'5	69'3	69'5	69'5	70'4	71'0	72'0	72'5	72'6
	18	69'3	69'1	69'0	69'2	70'0	70'7	71'5	72'1	72'5	73'0	73'2	73'5
	19	71'5	71'5	71'5	71'4	71'5	71'8	72'5	73'3	74'0	74'7	75'2	75'5
	20	70'6	70'6	70'0	70'5	68'8	69'7	69'6	69'7	69'5	69'4	69'2	68'6
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	59'5	59'2	59'8	60'3	61'0	61'6	61'8	62'4	62'6	62'8	63'4	63'6
	23	61'2	62'0	62'2	63'0	63'8	64'6	65'6	66'0	66'6	67'6	68'4	68'5
	24	65'6	65'6	65'6	66'0	66'6	67'7	68'6	69'0	69'7	71'0	71'3	71'9
	25	69'6	69'2	69'5	70'3	70'9	71'5	72'3	73'3	73'9	74'7	74'7	75'2
	26	70'8	70'5	70'5	70'3	70'9	71'7	72'3	72'9	73'2	74'0	74'7	74'6
	27	72'7	71'7	71'5	71'8	72'0	72'5	72'9	73'0	72'9	73'0	73'0	73'0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	71'2	71'1	71'0	71'4	71'6	72'6	72'8	73'4	74'0	74'4	74'7	75'2
	30	74'4	74'0	74'6	74'6	75'6	76'0	76'0	77'0	77'0	77'2	77'5	77'9
Hourly Means	66'63	66'67	66'83	67'19	67'69	68'17	68'54	68'92	69'20	69'67	69'94	70'14	

12h.	Sc. Div.
12h.	185'0
	194'3
	194'1
	189'2
	196'2
	190'4
	—
	197'4
	196'8
	189'5
	187'7
	191'8
	191'4
	—
	184'6
	190'0
	180'0
	180'0
	173'7
	187'9
	—
	202'2
	187'4
	180'6
	175'9
	174'2
	182'4
	—
	174'2
	169'3
	—
	186'39
	—
	72'0
	69'8
	68'8
	68'0
	64'9
	63'6
	—
	65'4
	67'1
	69'5
	68'6
	66'4
	67'0
	—
	72'6
	71'5
	73'0
	73'7
	75'7
	68'1
	—
	63'6
	69'5
	72'3
	75'5
	74'6
	73'0
	—
	75'5
	78'0
	—
	70'30

One Scale Division = .000086 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
185°0	187°7	170°7	174°9	177°0	181°1	179°0	176°9	176°9	178°6	171°0	171°0	180°55
194°3	188°0	191°1	188°6	184°7	186°9	193°9	191°5	182°9	185°8	193°3	195°2	188°73
194°1	191°7	191°7	189°6	189°2	185°8	186°7	186°7	186°7	185°3	188°5	188°3	189°65
188°2	188°9	188°8	189°6	189°3	189°6	188°3	188°5	188°4	187°4	192°6	190°5	188°48
196°2	196°4	193°9	195°0	191°4	188°9	196°7	193°7	194°1	199°3	201°5	201°5	194°28
190°4	204°0	203°0	200°8	202°1	202°7	—	—	—	—	—	—	199°21
—	—	—	—	—	—	202°6	202°6	204°2	204°3	206°6	207°7	—
197°4	198°9	198°4	204°1	199°0	178°5	195°3	193°6	195°0	189°2	199°1	194°5	195°96
196°8	198°2	193°9	193°8	196°8	194°5	195°9	196°8	196°9	196°8	198°4	199°9	196°39
189°5	187°8	187°8	185°2	186°3	186°1	186°1	190°0	191°9	191°8	191°8	191°5	191°78
187°7	187°8	188°9	188°9	189°1	189°1	187°5	190°8	190°4	193°1	193°7	195°7	189°43
191°8	191°8	191°2	191°2	192°4	192°4	193°6	193°1	192°5	195°9	194°5	196°9	191°90
191°4	192°5	192°0	193°6	193°6	193°7	—	—	—	—	—	—	188°43
—	—	—	—	—	—	189°0	189°0	187°8	185°7	178°6	176°9	—
184°6	184°2	181°6	181°7	178°6	176°3	177°1	156°4	160°8	170°4	181°4	183°0	180°84
190°0	185°9	186°0	184°3	179°3	182°4	179°8	171°4	180°0	181°3	176°6	181°4	182°48
180°0	180°7	180°0	179°4	179°9	180°6	180°4	180°4	180°4	177°1	179°9	182°2	182°27
180°0	177°5	178°1	173°4	176°4	176°4	170°5	162°4	164°8	179°5	179°5	180°0	178°16
173°7	173°7	174°7	174°4	174°4	174°4	176°8	178°2	178°2	178°2	181°0	181°8	177°30
187°9	187°9	187°9	189°5	190°0	190°8	—	—	—	—	—	—	—
—	—	—	—	—	—	200°2	195°4	190°3	187°1	181°4	199°9	187°73
202°2	204°2	203°5	191°9	192°8	195°4	194°0	194°7	191°6	190°7	194°9	199°2	197°39
187°4	187°4	188°0	187°6	187°9	188°0	183°1	187°0	188°8	188°8	177°5	184°2	190°63
180°6	182°0	179°1	176°3	177°0	174°8	174°5	176°4	178°7	176°6	172°5	175°3	180°95
175°9	176°9	174°4	174°5	175°5	175°5	175°5	176°3	176°6	178°1	180°2	181°3	176°98
174°2	174°7	174°7	175°8	175°8	176°6	176°7	166°9	169°8	174°2	172°6	178°9	174°70
182°4	182°4	182°4	181°8	178°7	178°4	—	—	—	—	—	—	177°24
—	—	—	—	—	—	170°6	173°9	177°9	178°9	173°6	179°6	—
174°2	173°7	175°8	176°8	175°3	176°4	175°8	178°6	177°3	176°7	175°4	175°4	177°25
169°3	168°6	169°3	169°0	167°3	166°8	168°8	168°8	170°0	170°0	171°3	175°4	169°74
186°39	186°67	185°65	185°07	184°61	183°91	183°91	183°08	183°56	183°88	185°03	187°20	185°69
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
72°0	71°8	71°7	71°9	71°7	71°5	71°2	70°5	70°3	70°0	69°7	69°4	70°53
69°8	69°1	69°0	69°0	68°0	67°8	67°9	67°5	67°0	66°7	66°4	65°6	68°39
68°8	68°8	68°8	68°5	68°4	68°0	67°6	67°8	67°6	67°6	67°2	67°4	67°51
68°0	67°8	67°7	67°8	67°5	67°3	67°0	66°7	66°4	66°2	65°8	65°8	67°44
64°9	64°9	64°8	64°6	64°0	63°8	63°2	62°6	62°1	61°8	61°6	61°4	63°92
63°6	63°2	63°4	63°6	63°0	62°2	—	—	—	—	—	—	61°99
—	—	—	—	—	—	60°0	59°9	59°8	59°5	59°3	59°3	—
65°4	65°6	65°6	65°1	64°8	64°4	63°7	62°8	62°5	61°6	61°0	60°6	63°00
67°1	67°5	67°4	67°2	66°6	66°0	65°5	64°8	64°4	64°0	63°6	62°8	64°74
69°5	69°5	69°5	69°0	68°8	68°6	68°4	67°6	67°2	66°7	66°6	65°4	67°14
68°6	68°6	68°0	68°2	68°1	67°7	67°6	66°6	65°8	65°6	64°6	63°6	67°05
66°4	66°6	66°4	66°0	65°6	65°4	64°9	64°6	64°4	63°7	63°1	62°0	65°22
67°0	66°6	66°0	66°1	65°7	65°2	—	—	—	—	—	—	66°10
—	—	—	—	—	—	68°0	67°5	67°1	66°9	66°5	66°0	—
72°6	72°9	72°6	72°8	72°0	71°6	71°2	71°0	70°7	70°2	69°7	69°0	70°40
71°5	71°3	70°8	70°8	70°3	70°2	70°2	69°2	68°5	68°0	67°8	68°2	70°02
73°0	73°0	72°7	72°5	72°5	72°0	71°6	71°0	70°6	70°4	70°2	69°5	70°79
73°7	74°2	74°2	74°2	74°0	73°5	73°0	72°9	72°7	72°0	71°5	71°2	72°03
75°7	75°2	75°0	74°5	74°4	73°7	73°3	73°1	72°5	72°0	71°4	70°8	73°17
68°1	67°7	67°4	67°0	66°5	66°3	—	—	—	—	—	—	66°66
—	—	—	—	—	—	60°0	60°0	60°0	60°0	60°0	59°6	—
63°6	63°6	63°7	64°0	61°2	61°1	63°8	63°5	63°2	62°6	61°8	61°5	62°40
69°5	69°6	68°8	68°6	68°5	68°0	67°4	66°8	66°6	66°4	65°6	65°1	66°27
72°3	72°4	72°7	73°5	73°3	72°9	73°0	72°5	71°5	71°1	70°7	69°9	70°18
75°5	75°3	75°1	75°1	74°6	74°4	73°6	73°0	72°4	71°9	71°3	71°0	72°82
74°6	75°0	74°9	74°5	74°4	74°2	74°0	73°7	73°7	73°5	73°3	73°0	73°13
73°0	72°8	72°6	72°4	72°4	72°3	—	—	—	—	—	—	72°47
—	—	—	—	—	—	73°1	72°7	72°5	72°2	71°7	71°5	—
75°5	75°7	75°6	75°5	75°0	74°9	74°5	74°3	73°9	73°7	73°2	73°0	73°67
78°0	78°1	78°1	77°7	77°5	77°1	76°9	76°6	75°8	75°0	74°8	74°5	76°33
70°30	70°26	70°12	70°00	69°68	69°35	68°87	68°43	68°05	67°64	67°25	66°85	68°60

VERTICAL FORCE.

One Scale Division = $\cdot 000067$ parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1' 64$.

Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	174'8	172'3	169'5	169'5	168'6	169'7	170'9	163'8	165'7	165'7	167'9	171'0
2	160'7	163'7	167'4	169'9	167'0	169'8	171'0	172'5	174'3	176'0	176'0	175'1
3	169'0	167'7	168'1	167'1	169'4	170'8	172'8	174'3	176'3	175'1	179'5	178'8
4	170'0	171'8	170'5	174'6	176'5	176'5	175'5	174'7	175'0	174'6	173'0	172'5
5	—	—	—	—	—	—	—	—	—	—	—	—
6	144'4	166'5	166'1	170'7	171'5	172'7	171'0	172'3	173'4	172'8	175'5	179'0
7	180'5	181'2	179'5	179'0	180'4	177'8	176'4	174'8	177'4	179'3	177'2	175'3
8	180'7	183'0	185'5	184'3	182'0	181'2	180'2	178'5	177'7	177'8	179'8	179'8
9	179'7	177'9	176'3	175'0	172'2	172'3	168'9	169'3	173'3	174'5	175'0	175'6
10	172'7	170'9	169'1	166'4	163'8	162'0	160'6	161'7	160'4	158'6	159'0	158'3
11	161'3	163'4	161'5	156'4	157'5	158'4	160'3	160'3	163'3	164'3	171'9	177'8
12	—	—	—	—	—	—	—	—	—	—	—	—
13	172'3	168'0	167'2	169'7	168'7	170'8	173'7	173'6	179'8	181'0	186'9	184'2
14	182'7	186'2	181'4	181'4	180'6	181'5	183'5	181'6	184'6	187'0	187'5	190'8
15	185'3	188'8	185'0	188'0	189'1	190'1	191'5	191'5	190'3	190'8	192'9	193'8
16	190'5	185'2	187'5	187'5	188'1	189'6	190'5	189'1	191'5	191'1	191'1	190'8
17	191'4	191'4	190'1	188'0	186'9	186'4	187'3	188'3	184'3	184'3	182'1	184'9
18	182'8	183'7	184'6	184'7	184'6	182'1	183'1	185'3	186'7	186'7	186'8	186'3
19	—	—	—	—	—	—	—	—	—	—	—	—
20	180'4	178'5	177'3	176'0	175'0	175'0	176'0	173'5	175'4	175'5	173'9	172'7
21	177'2	176'0	175'0	174'5	172'9	169'1	168'4	168'4	167'4	168'3	168'8	170'0
22	176'8	177'2	177'2	176'2	178'0	177'9	177'0	175'2	174'2	171'0	168'3	172'7
23	170'2	172'9	173'0	171'0	169'7	169'8	168'9	167'9	169'9	173'1	173'4	174'1
24	175'3	175'9	175'5	174'9	172'3	173'6	173'3	176'5	179'8	178'7	183'5	183'2
25	182'9	180'5	180'5	175'6	172'1	171'4	171'6	174'4	180'2	178'7	178'4	176'4
26	—	—	—	—	—	—	—	—	—	—	—	—
27	179'0	178'5	175'4	174'2	174'2	170'4	169'2	169'2	171'4	173'5	174'5	176'4
28	176'8	179'5	178'1	178'6	176'6	173'6	172'2	171'5	173'2	171'4	171'4	174'3
29	173'4	173'0	166'6	164'6	162'8	161'6	164'1	174'1	167'9	167'6	163'4	161'9
30	162'7	162'3	165'6	163'9	162'6	163'1	162'6	161'8	160'5	161'7	166'0	171'7
31	168'9	168'8	168'8	171'7	167'9	168'6	168'7	169'9	173'9	171'5	172'4	176'6
Hourly Means	174'90	175'73	174'90	174'57	173'74	173'55	173'62	173'85	175'10	175'54	176'15	177'30

TEMPERATURE OF THE VEIICAL FORCE MAGNET.

	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	74'3	75'0	75'2	75'8	76'7	77'3	77'5	77'5	77'9	78'3	78'3	78'1
2	73'6	73'8	74'3	74'7	75'0	75'5	76'4	75'7	75'8	75'9	75'9	75'7
3	72'5	72'5	72'9	73'5	73'9	74'5	74'6	74'6	74'6	74'7	74'8	75'0
4	70'3	70'7	71'1	71'6	72'0	73'0	73'6	74'3	74'5	75'3	75'7	75'8
5	—	—	—	—	—	—	—	—	—	—	—	—
6	73'7	74'1	74'5	74'6	75'1	75'2	75'4	75'6	75'8	76'8	77'3	77'9
7	73'0	72'6	72'2	72'7	73'5	73'8	73'8	74'0	74'2	74'3	74'9	75'2
8	70'2	70'0	69'6	69'8	70'0	70'5	70'7	71'1	71'5	72'8	73'5	74'0
9	72'1	72'5	73'0	73'7	74'3	74'2	74'3	74'1	74'1	74'5	74'2	75'0
10	76'1	76'3	76'6	77'5	78'3	79'7	81'2	82'0	81'6	82'6	83'7	83'2
11	77'5	78'0	78'2	78'3	79'0	80'0	80'5	80'8	80'9	80'7	80'3	80'1
12	—	—	—	—	—	—	—	—	—	—	—	—
13	73'4	73'2	73'4	73'5	73'5	73'7	73'7	73'7	74'2	74'3	74'4	75'2
14	69'7	69'8	70'0	70'5	70'3	70'3	70'3	70'2	70'2	70'3	70'1	69'7
15	65'1	64'8	65'5	66'0	66'0	66'2	66'4	66'0	66'1	66'6	66'3	66'6
16	65'0	65'0	65'5	65'5	65'6	66'0	66'0	66'0	66'5	66'7	66'9	67'3
17	64'6	65'0	65'4	66'0	66'7	67'6	67'4	68'0	68'5	69'3	69'5	69'6
18	65'6	66'4	66'5	67'7	68'0	69'2	69'0	69'6	70'0	70'7	71'0	71'3
19	—	—	—	—	—	—	—	—	—	—	—	—
20	71'4	71'5	71'5	72'0	72'5	73'1	73'7	74'2	74'4	74'7	75'3	75'5
21	72'5	72'5	72'8	73'5	74'0	74'0	75'5	75'6	75'9	76'5	76'5	76'5
22	72'4	72'0	72'0	72'3	72'5	72'7	73'0	73'5	73'7	74'3	74'5	74'7
23	72'1	72'1	72'5	73'2	73'7	74'0	74'3	74'5	75'4	75'8	76'1	76'3
24	73'7	73'8	73'4	73'0	73'0	73'0	72'5	72'5	72'3	72'5	72'5	72'5
25	70'5	71'3	71'5	72'0	72'8	73'3	73'5	74'0	74'8	75'1	75'5	76'0
26	—	—	—	—	—	—	—	—	—	—	—	—
27	72'1	72'3	73'0	73'0	74'5	74'5	74'5	74'1	74'3	74'5	74'8	75'0
28	70'5	69'3	71'6	71'5	71'9	73'1	73'4	73'8	74'4	74'5	75'0	74'8
29	72'8	73'3	73'9	74'8	75'5	76'3	77'0	77'3	77'3	78'0	78'6	78'9
30	76'8	77'2	77'4	77'5	78'0	78'6	78'7	79'2	79'7	80'3	80'7	80'7
31	76'0	75'8	75'5	76'0	75'9	75'8	76'4	76'5	76'7	77'0	77'7	77'5
Hourly Means	71'76	71'88	72'18	72'60	73'04	73'52	73'83	74'01	74'27	74'70	74'96	75'12

* Four minutes late.

* Fifteen minutes late.

Vol.

VERTICAL FORCE.

One Scale Division = '000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
171°0	171°0	172°7	176°3	171°3	175°6	176°4	175°6	173°9	172°3	158°7	151°4	148°6	166°7	168°70
175°1	175°1	178°4	178°4	174°6	174°3	175°7	172°6	175°0	166°7	166°8	163°8	157°0	168°4	170°63
178°8	178°8	181°5	181°9	180°9	176°7	170°5	166°6	149°7	157°9	166°7	168°0	171°0	168°5	171°20
172°5	172°5	174°2	174°3	172°3	174°7	174°8	175°0	—	—	—	—	—	—	172°37
179°0	179°0	—	—	—	—	—	—	170°9	173°1	167°6	164°0	167°6	163°2	172°96
175°3	175°3	176°8	178°1	171°7	173°5	166°2	171°2	171°4	157°4	167°7	175°4	177°7	180°0	178°85
179°8	179°8	176°6	179°2	179°5	179°3	179°3	179°4	179°4	178°9	179°8	180°3	181°0	181°0	177°94
175°6	175°6	179°5	175°5	175°5	174°5	174°3	176°2	172°4	172°3	170°4	170°7	178°8	180°0	172°86
158°3	158°3	175°2	173°8	171°9	171°9	171°8	172°4	168°1	169°5	170°2	168°3	172°0	173°5	160°96
177°8	177°8	159°8	161°9	162°4	161°2	162°3	160°8	160°8	160°0	155°4	152°5	145°2	157°3	163°94
184°2	184°2	169°5	167°5	167°5	162°2	164°1	158°9	—	—	—	—	—	—	173°15
190°8	190°8	—	—	—	—	—	—	163°7	163°7	165°2	164°7	161°3	169°9	183°12
193°8	193°8	178°2	178°2	174°6	175°6	174°5	169°1	169°1	168°3	169°4	170°5	161°5	164°6	189°12
190°8	190°8	188°2	186°5	186°5	184°9	178°0	181°2	172°9	176°6	176°2	184°7	186°7	183°6	188°24
184°9	184°9	191°2	190°7	190°0	188°2	187°8	184°7	179°4	181°8	189°1	192°2	193°2	194°8	186°07
186°8	186°8	188°8	190°7	188°9	189°6	190°2	190°0	190°4	189°7	176°1	178°6	183°3	188°0	171°42
172°7	172°7	184°9	185°1	183°5	184°4	185°0	184°4	185°9	189°5	187°5	186°9	180°3	182°8	170°12
170°0	170°0	186°4	185°1	181°9	180°4	180°0	180°0	—	—	—	—	—	—	173°64
172°7	172°7	—	—	—	—	—	—	170°1	169°8	158°4	173°0	174°6	179°4	171°47
170°0	170°0	172°9	172°9	173°2	171°8	172°6	165°2	165°7	153°7	160°4	165°0	165°6	165°9	178°06
172°7	172°7	170°4	170°4	170°4	171°5	170°9	170°6	163°3	164°4	165°7	166°0	172°0	171°3	173°71
173°2	173°2	172°7	172°8	172°2	170°4	173°5	180°1	180°4	173°0	168°5	170°6	162°4	166°1	172°25
173°2	173°2	173°2	173°3	170°1	170°7	170°5	170°4	169°7	171°2	171°7	171°7	173°0	175°0	172°67
183°2	183°2	183°2	183°8	181°7	179°6	178°5	180°6	177°7	173°7	175°0	177°6	174°5	182°1	165°97
176°4	176°4	173°1	172°3	171°3	170°3	171°0	170°9	—	—	—	—	—	—	163°25
176°4	176°4	—	—	—	—	—	—	173°5	170°6	168°0	168°3	166°7	170°4	169°00
174°3	174°3	173°8	173°8	174°8	174°4	171°0	164°9	163°8	166°4	163°4	161°7	178°5	178°2	
167°2	167°2	171°6	170°8	169°0	169°1	168°9	170°9	171°6	170°9	171°9	170°2	170°7	171°2	
171°7	171°7	167°2	171°3	171°1	165°2	165°2	165°7	163°7	160°6	160°9	161°1	161°1	166°1	
171°9	171°9	173°4	169°8	163°5	155°7	154°6	154°6	156°2	156°5	165°4	166°5	166°5	167°7	
177°30	177°30	171°9	171°9	177°4	169°4	170°3	170°3	158°4	162°6	157°3	154°9	169°5	174°3	
176°53	176°53	176°53	176°53	175°25	173°89	173°39	172°68	170°26	169°30	168°64	169°61	170°49	173°70	173°72

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
77°9	77°5	77°1	76°6	76°2	76°0	75°8	75°5	75°0	75°0	74°4	73°9	73°9	76°37
75°9	75°8	76°0	76°0	75°6	75°2	74°5	74°3	74°2	73°8	73°7	72°4	72°4	74°99
75°0	75°0	74°4	73°8	73°5	73°5	73°0	72°2	71°6	71°0	70°8	70°2	70°2	73°42
75°7	76°6	75°8	75°4	75°0	74°6	—	—	—	—	—	—	—	74°23
77°3	77°5	77°0	76°7	76°5	76°2	75°5	75°2	74°9	74°4	73°8	73°0	73°0	75°60
74°9	75°2	74°5	74°3	74°0	73°2	72°6	72°4	72°0	71°7	71°6	70°8	70°8	73°40
73°5	74°0	74°6	74°5	74°2	73°7	73°4	73°2	72°7	72°5	72°3	71°8	71°8	72°31
73°0	73°0	76°1	76°4	76°1	75°8	75°5	75°5	75°0	74°8	74°7	74°9	75°0	74°65
80°3	80°3	82°5	81°8	81°5	80°5	80°4	80°0	79°7	79°4	79°2	78°8	78°4	80°13
80°3	80°3	80°1	80°0	80°0	80°3	80°0	79°7	—	—	—	—	—	78°57
75°2	75°0	74°9	74°9	74°3	74°0	73°7	73°0	72°4	71°7	71°2	71°2	71°2	73°65
69°7	69°2	69°0	68°6	68°2	67°8	67°5	67°0	66°7	66°4	66°0	65°3	65°3	68°88
66°3	66°6	67°0	67°0	66°6	66°6	66°3	65°3	65°0	64°5	64°4	63°8	63°8	65°92
67°0	67°3	67°6	67°3	67°0	66°7	66°2	65°8	65°4	65°0	64°6	64°0	64°0	66°15
69°5	69°6	69°7	69°5	69°2	68°6	68°0	67°1	66°6	66°3	66°4	65°6	65°6	67°65
71°0	71°3	71°5	71°5	71°0	70°7	70°0	—	—	—	—	—	—	69°98
75°3	75°5	75°8	75°5	75°5	75°4	75°0	74°5	74°3	74°0	73°6	73°0	72°8	73°95
76°5	76°5	76°3	76°0	75°7	75°3	75°2	74°8	74°5	74°2	74°0	73°5	72°8	74°71
74°5	74°7	74°5	74°7	74°1	73°7	73°0	72°9	73°0	73°1	72°7	72°5	71°5	73°25
76°1	76°3	76°4	76°3	75°9	75°6	75°2	74°9	75°1	74°8	74°5	74°0	74°0	74°71
72°5	72°5	72°5	72°5	72°7	72°7	72°5	72°3	72°0	71°6	71°2	71°2	70°5	72°45
76°0	76°0	76°2	76°2	76°0	75°8	—	—	—	—	—	—	—	74°05
75°0	75°2	74°5	74°3	74°0	73°7	73°2	72°3	72°0	71°6	71°0	70°8	70°8	73°51
75°0	75°0	75°0	75°3	75°1	74°8	74°3	74°3	74°2	74°5	74°7	74°2	74°2	73°76
78°5	78°5	78°5	78°5	78°5	78°7	78°5	78°2	78°0	77°8	77°3	77°0	76°7	77°08
80°7	80°5	80°1	80°0	79°5	79°3	78°7	78°5	78°0	77°5	77°0	76°4	76°4	78°79
77°5	77°3	76°5	76°2	76°2	75°9	75°4	74°7	74°1	73°6	73°4	72°5	72°5	75°84
75°20	75°11	74°91	74°71	74°41	74°08	73°72	73°33	72°98	72°63	72°34	71°77	—	73°63

VERTICAL FORCE.												
One Scale Division = '000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
AUGUST.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	174'9	175'0	171'4	171'5	170'5	169'3	173'6	170'7	171'7	174'5	175'9	177'8
2	—	—	—	—	—	—	—	—	—	—	—	—
3	177'3	170'6	174'7	172'9	171'8	170'6	170'8	172'0	171'4	169'0	169'0	170'7
4	167'8	171'3	170'0	169'7	167'6	166'8	165'4	164'6	165'7	164'0	162'3	162'0
5	167'9	167'4	165'5	164'6	162'6	161'8	161'8	161'8	160'3	159'8	161'7	157'5
6	163'2	162'1	159'7	158'8	159'3	158'8	157'0	159'1	158'2	159'7	159'3	164'3
7	143'7	153'3	156'2	158'5	162'3	165'7	165'4	166'5	165'7	180'9	169'2	167'9
8	158'2	157'2	164'4	165'4	167'7	171'6	171'6	172'3	175'0	179'6	175'8	171'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	169'8	169'8	174'8	176'8	176'2	175'8	176'4	174'8	172'5	174'0	173'4	173'4
11	182'8	182'0	179'6	178'7	175'5	174'8	175'0	173'3	174'6	175'9	173'1	174'5
12	182'0	180'8	179'8	179'8	177'3	172'2	172'2	173'5	177'8	177'1	179'7	182'6
13	169'8	164'4	159'7	162'6	161'5	165'5	165'8	166'7	167'2	168'7	167'2	166'0
14	170'7	174'1	166'2	165'0	166'5	167'5	166'8	166'8	172'9	176'0	181'1	173'1
15	161'4	168'1	169'9	169'5	168'5	169'5	169'5	170'7	169'9	169'6	172'3	175'7
16	—	—	—	—	—	—	—	—	—	—	—	—
17	174'5	176'5	176'2	175'3	174'2	174'0	175'5	178'0	176'9	177'0	175'5	175'0
18	181'2	182'7	183'1	181'9	180'3	178'7	180'9	182'8	182'5	181'7	183'2	183'2
19	182'2	186'2	186'2	185'7	186'2	186'3	187'0	185'5	184'9	187'6	186'4	185'3
20	184'4	184'1	184'9	184'9	182'5	185'3	184'1	183'6	183'6	184'4	184'4	184'4
21	186'1	185'0	183'7	181'4	179'8	177'9	176'5	175'0	177'5	179'4	179'0	181'8
22	178'1	176'2	178'2	175'3	175'2	174'6	174'7	175'9	174'8	179'4	184'0	183'4
23	—	—	—	—	—	—	—	—	—	—	—	—
24	182'1	178'9	179'9	177'2	174'4	173'2	173'5	175'4	170'3	177'5	182'1	190'8
25	174'7	184'6	183'8	181'0	179'2	178'1	176'8	178'3	179'7	177'8	176'7	180'8
26	182'6	181'6	179'8	176'9	174'9	174'0	172'1	173'0	171'9	171'4	171'4	171'8
27	181'5	179'2	178'9	177'7	175'3	172'7	169'5	169'1	174'5	179'3	183'7	199'6
28	176'2	178'3	175'9	174'7	174'4	173'3	175'3	177'4	176'9	174'2	189'3	188'8
29	175'0	171'7	170'5	169'2	169'0	167'0	168'6	170'9	170'6	172'2	176'7	175'4
30	—	—	—	—	—	—	—	—	—	—	—	—
31	171'9	171'0	168'0	166'8	166'7	165'2	164'7	163'8	163'6	163'7	164'8	162'3
Hourly Means	173'85	174'31	173'88	173'15	172'39	171'93	171'94	172'33	172'76	174'42	175'28	176'12
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
AUGUST.												
1	72'2	73'3	73'5	73'7	74'4	74'9	75'1	75'0	75'5	76'1	76'0	76'3
2	—	—	—	—	—	—	—	—	—	—	—	—
3	71'3	71'5	72'0	72'5	73'0	73'7	74'7	75'3	76'0	77'0	77'0	77'2
4	73'0	73'5	74'0	74'3	75'0	76'0	76'5	77'5	78'0	79'0	79'5	80'0
5	76'3	76'5	77'0	77'7	78'7	80'3	80'2	80'5	81'0	81'6	82'0	82'2
6	78'2	78'1	78'0	78'5	79'7	80'3	80'6	80'7	80'8	81'0	81'4	81'4
7	76'5	76'0	76'3	76'5	77'5	77'5	78'3	79'0	79'3	79'5	80'0	80'4
8	75'5	75'2	76'0	74'5	74'3	74'5	74'7	75'5	75'5	75'8	75'7	75'7
9	—	—	—	—	—	—	—	—	—	—	—	—
10	72'1	71'9	71'6	71'7	72'6	73'3	74'0	74'2	74'3	74'8	75'5	75'7
11	69'5	70'0	70'2	70'5	71'3	72'0	72'8	73'0	73'2	73'5	74'0	74'2
12	70'0	70'3	70'3	70'8	72'3	73'0	73'7	74'3	74'8	75'5	76'2	76'3
13	74'0	74'0	74'3	74'3	75'0	76'0	76'5	77'1	77'5	77'0	77'3	77'7
14	73'5	73'5	74'0	74'9	75'2	76'1	76'2	76'5	76'7	77'0	77'3	77'5
15	73'0	73'6	73'7	74'3	75'0	76'0	76'5	77'0	77'2	78'0	78'5	78'5
16	—	—	—	—	—	—	—	—	—	—	—	—
17	71'5	71'6	71'6	72'3	73'0	73'5	73'7	73'7	73'7	74'0	74'2	74'2
18	68'3	68'3	68'5	68'7	69'2	69'5	69'4	69'2	69'3	69'5	69'8	70'0
19	65'7	66'0	66'3	66'3	66'5	67'0	67'3	67'5	68'0	68'4	68'3	68'5
20	67'5	67'3	67'0	66'7	66'8	67'0	67'0	67'0	67'5	67'6	68'0	68'3
21	67'0	67'3	68'0	68'2	68'0	70'0	70'5	70'6	71'0	72'0	72'2	72'7
22	70'6	70'4	70'3	70'2	70'2	70'7	71'0	71'2	71'3	71'7	71'7	71'7
23	—	—	—	—	—	—	—	—	—	—	—	—
24	68'5	68'7	68'8	69'4	70'5	70'8	71'1	71'1	72'4	72'5	71'7	71'6
25	66'7	67'4	68'2	69'0	69'7	70'0	70'5	71'0	71'3	72'0	72'3	72'8
26	69'5	69'5	70'5	70'7	71'0	71'6	72'0	72'5	73'0	73'5	73'7	73'5
27	69'5	69'8	70'3	71'1	71'8	73'0	73'5	74'0	74'2	75'0	75'0	74'5
28	70'8	70'5	70'5	70'7	71'0	71'7	72'0	72'7	73'3	74'3	74'5	74'5
29	71'7	71'9	72'3	72'7	73'5	74'4	75'1	75'2	74'8	74'7	74'4	74'0
30	—	—	—	—	—	—	—	—	—	—	—	—
31	72'3	72'5	73'5	74'0	74'6	75'0	75'5	76'0	76'5	77'0	77'5	77'5
Hourly Means	71'33	71'48	71'80	72'08	72'72	73'38	73'78	74'13	74'47	74'92	75'14	75'27

* Fourteen minutes late.

* Five minutes late.

1° 64.

0 ^h .	11 ^h .
Sc. Div.	Sc. Div.
59	177.8
90	170.7
23	162.0
17	157.5
93	164.3
92	167.9
58	171.0
34	173.4
31	174.5
97	182.6
72	166.0
11	173.1
23	175.7
55	175.0
32	183.2
64	185.3
44	184.4
90	181.8
40	183.4
21	190.8
67	180.8
14	171.8
37	199.6
93	188.8
67	175.4
48	162.3
28	176.12

VERTICAL FORCE.

One Scale Division = .000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
178.2	173.6	172.6	170.9	171.5	171.9	157.8	156.1	161.0	161.6	164.9	172.9	170.41
170.9	174.8	169.3	166.2	168.0	168.0	169.4	165.2	169.1	170.4	169.7	168.9	170.45
163.5	160.3	161.3	162.4	160.3	161.9	162.7	162.5	162.5	162.5	163.6	167.0	164.49
160.2	156.7	158.7	158.6	158.6	158.6	159.0	159.6	157.8	157.8	158.9	159.0	160.67
159.9	168.1	159.0	140.3	114.8	91.9	151.4	152.5	150.6	80.0	106.4	143.8	147.42
165.5	167.5	160.4	161.7	139.9	149.6	144.6	90.8	128.7	150.5	140.4	150.8	154.40
170.8	170.4	169.4	170.5	160.3	165.8	145.6	162.7	161.1	165.5	163.6	169.0	166.85
172.0	176.6	177.3 ^b	176.3	173.7	160.2	161.8	162.0	169.9	169.6	177.8	180.7	172.73
170.1	170.6	175.2	169.1	169.3	175.0	176.1	161.0	168.7	175.5	179.3	179.8	174.56
177.8	170.5	171.3	171.3	168.4	166.7	155.4	160.8	154.9	147.7	145.3	162.0	170.29
166.0	166.0	166.5	167.0	167.0	152.5	146.4	129.3	162.6	162.0	165.3	170.8	162.89
169.7	167.8	169.8	161.8	147.8	164.6	136.7	151.3	140.0	149.3	162.9	161.3	163.73
171.4	167.9	169.4	163.1	163.6	134.3	144.7	136.1	158.7	158.9	154.0	164.0	163.36
175.9	173.0	174.7	170.0	176.2	176.6	175.0	175.0	178.7	180.1	180.1	179.8	175.99
182.3	183.2	185.0	184.0	183.3	177.0	183.1	184.0	183.0	182.4	183.3	185.0	182.41
195.3	183.8	184.2	184.8	185.2	184.6	183.8	173.8	178.4	183.7	182.9	184.7	184.36
184.4	183.7	183.8	183.4	184.6	183.9	183.9	184.3	183.5	182.5	176.9	184.7	183.76
179.1	179.1	178.0	175.7	174.5	174.0	172.7	168.0	167.9	172.7	176.3	178.2	177.47
180.4	181.6	180.0	179.1	179.1	179.1	178.3	179.4	180.1	180.2	181.4	181.7	178.76
186.2	186.5	184.6	174.1	187.0	183.2	171.7	176.2	176.2	178.3	179.6	177.9	179.03
178.9	179.2	178.5	181.5	182.8	176.7	175.0	170.2	177.9	177.6	170.9	174.9	178.15
171.5	171.8	172.4	175.3	169.6	169.3	171.3	169.9	173.4	169.6	173.1	173.1	173.43
193.3	176.7	173.1	173.0	174.5	171.6	164.8	168.5	168.5	172.3	172.4	176.4	176.09
176.2	171.1	170.0	155.7	155.6	167.9	169.7	162.5	162.9	168.6	167.7	166.8	172.06
176.9	182.7	180.7	179.9	177.6	172.1	163.9	164.7	165.5	167.8	170.4	171.9	172.12
163.5	165.2	161.8	162.4	164.8	165.1	165.6	167.8	166.9	166.8	168.8	168.6	165.83
174.3	173.40	172.58	169.93	167.62	165.47	164.25	161.32	165.71	165.15	166.77	171.30	170.84

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
76.3	76.2	75.7	75.5	75.3	75.3	74.3	73.7	73.1	72.8	72.2	72.5	74.54
76.6	76.8	76.6	76.5	76.4	76.1	75.5	75.5	74.7	74.5	73.7	73.3	74.89
80.2	80.7	80.0	79.5	79.3	79.2	78.7	78.5	78.4	78.0	77.2	76.5	77.60
82.3	82.5	82.3	82.0	81.8	81.5	81.0	81.0	80.6	80.2	79.8	79.2	80.34
81.4	81.5	81.4	81.2	82.5	81.8	81.0	80.7	78.8	79.5	79.5	79.0	80.29
80.4	80.3	79.7	79.5	79.5	79.0	78.7	78.5	79.0	77.9	76.5	76.2	78.42
75.6	75.4	76.0	75.7	75.5	75.2	73.3	73.5	73.2	72.7	72.5	72.0	74.73
75.7	75.5	74.5	73.7	73.5	72.7	72.5	72.0	71.2	71.0	70.1	69.6	73.07
74.3	74.5	73.7	73.1	73.2	72.3	72.8	71.3	71.2	71.0	70.6	70.3	72.19
76.5	76.0	76.4	76.4	76.3	75.9	75.5	75.2	74.7	74.7	74.7	74.3	74.34
77.8	78.0	77.8	78.0	78.2	78.0	77.2	76.8	76.1	75.5	75.2	74.5	76.41
77.6	77.5	77.3	78.5	78.0	76.3	76.1	75.7	75.2	74.7	74.5	73.6	75.97
78.7	79.0	78.8	78.5	78.5	78.5	73.0	72.8	72.5	72.2	71.7	71.5	75.71
74.3	74.0	73.6	73.0	72.4	71.5	71.1	70.8	70.4	70.0	69.6	69.2	72.37
70.0	69.8	69.6	69.5	69.3	68.6	68.2	67.8	67.6	67.5	66.9	66.5	68.79
68.5	68.5	68.5	68.2	68.3	68.5	68.3	68.0	67.6	67.7	67.9	67.8	67.65
68.4	68.2	68.2	68.5	68.3	68.3	68.0	68.0	67.6	67.6	67.5	67.1	67.66
72.7	72.7	72.7	72.6	72.5	72.5	72.5	71.9	71.4	71.2	71.2	71.2	70.98
71.7	71.7	71.3	71.3	71.1	71.0	70.8	70.7	70.5	70.0	69.5	69.2	70.82
72.0	72.3	72.2	71.8	71.6	71.0	70.2	69.5	69.3	69.0	68.5	67.5	70.50
72.6	73.0	73.0	72.7	72.2	72.2	72.5	71.3	71.2	70.7	70.5	70.0	70.95
73.5	73.7	73.3	73.5	72.7	72.1	71.7	71.5	71.1	70.7	70.5	70.2	71.90
74.5	74.5	74.2	74.4	74.1	73.9	72.5	71.9	71.7	71.6	71.5	71.5	72.83
74.7	74.8	76.1	76.0	75.5	75.2	75.0	74.9	74.7	73.9	73.8	73.1	73.51
73.8	73.5	73.5	73.4	73.0	72.8	74.4	74.0	73.3	73.3	73.3	72.8	73.57
77.5	77.3	77.2	77.0	76.7	76.2	76.0	75.7	75.4	74.8	74.6	74.4	75.61
75.29	75.30	75.14	75.00	74.83	74.45	73.88	73.51	73.11	72.80	72.44	72.04	73.68

* Ten minutes later.

P 2

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean (Gottin- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
SEPTEMBER.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	169'1	165'5	166'5	165'7	164'0	161'1	160'5	160'5	161'1	161'1	161'1	160'9
2	165'9	165'9	165'0	164'1	160'9	159'7	159'5	159'2	159'7	159'6	158'0	157'1
3	163'6	163'6	162'8	162'7	162'0	162'5	162'4	163'4	165'9	165'3	165'5	164'2
4	142'5	141'7	149'2	156'2	161'9	164'1	166'9	167'3	168'2	168'6	169'7	172'6
5	153'1	152'4	154'3	157'9	162'5	167'5	169'3	192'5	180'5	193'6	182'4	174'3
6	—	—	—	—	—	—	—	—	—	—	—	—
7	170'4	168'1	166'1	164'3	163'5	163'5	163'5	161'5	161'2	159'8	159'8	159'0
8	155'4	156'1	157'7	157'5	161'8	168'8	176'4	178'9	186'5	189'0	177'3	173'1
9	176'9	179'0	178'1	177'3	174'7	178'8	180'8	181'2	183'2	186'4	185'4	184'4
10	183'6	182'1	182'1	180'5	178'3	179'2	178'0	179'7	182'7	184'0	184'6	184'8
11	139'2	156'5	159'8	168'1	174'6	173'6	179'8	184'6	179'3	178'4	180'9	177'8
12	164'9	169'2	167'0	165'7	169'8	167'0	168'4	169'1	171'6	169'7	176'1	171'7
13	—	—	—	—	—	—	—	—	—	—	—	—
14	164'3	163'4	164'2	166'3	166'3	166'3 ^a	167'8	168'6	166'7	165'3	165'9	166'4
15	165'0	165'0	166'8	167'2	169'6	170'3	170'3	174'4	176'6	177'7	176'6	177'6
16	183'4	184'1	182'9	180'4	179'1	178'7	179'6	180'2	180'9	181'4	180'1	180'1
17	176'4	178'1	178'6	179'5	181'0	181'2	182'0	183'3	184'4	185'4	188'0	187'2
18	184'6	184'2	185'3	181'4	183'7	183'3	182'4	181'7	182'7	182'2	181'5	180'3
19	186'6	186'1	186'1	183'8	182'9	181'9	181'9	181'7	181'9	183'8	181'7	180'0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	183'9	182'1	182'0	182'5	182'8	182'8	184'4	188'3	189'9	196'6	189'9	187'2
22	114'6	134'8	147'2	172'8	194'2	198'9	212'8	236'0	236'5	227'7	222'6	213'2
23	193'0	194'9	193'3	191'8	189'9	188'4	186'4	185'3	187'7	184'4	184'4	185'0
24	175'8	178'9	177'5	177'4	177'6	180'0	178'8	182'3	183'8	183'7	184'1	182'4
25	179'1	187'3	187'7	185'5	188'0	187'4	189'5	191'2	188'6	188'6	189'1	188'7
26	187'5	189'3	190'9	188'8	189'6	189'3	188'3	187'4	190'2	189'6	188'5	190'6
27	—	—	—	—	—	—	—	—	—	—	—	—
28	196'1	197'1	196'6	195'4	194'0	193'5	194'4	196'4	196'8	194'5	193'5	191'5
29	192'4	192'4	192'3	190'6	188'2	185'4	184'8	184'9	184'8	185'0	184'4	184'4
30	186'3	187'0	186'0	182'5	182'5	180'6	180'2	180'2	180'1	181'4	182'5	182'7
Hourly Means	171'29	173'38	174'08	174'96	176'28	176'68	178'04	180'76	181'22	181'65	180'52	179'12
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
SEPTEMBER.	1	73'7	74'0	74'3	75'0	75'7	76'3	77'0	77'6	78'3	78'5	79'0
2	75'5	75'9	75'7	76'0	76'5	77'3	77'8	78'5	79'0	79'3	79'5	79'7
3	76'8	76'6	76'4	76'2	76'3	76'5	76'5	76'5	76'5	76'5	76'5	76'1
4	74'5	75'0	75'2	75'4	75'3	75'9	76'1	76'2	76'5	76'9	77'0	77'0
5	75'5	75'7	76'0	76'4	77'2	77'2	77'4	77'1	77'4	77'5	77'7	77'7
6	—	—	—	—	—	—	—	—	—	—	—	—
7	74'5	75'0	75'5	76'5	77'0	77'5	78'0	78'8	79'5	80'0	80'3	80'3
8	75'0	74'8	75'5	75'5	75'5	75'5	75'5	75'6	75'7	75'4	75'0	74'3
9	67'5	67'5	68'0	68'1	68'7	68'7	68'7	68'5	68'5	68'6	68'7	68'6
10	66'8	66'5	66'9	67'5	67'5	68'5	68'5	68'6	68'7	68'2	69'0	69'5
11	68'4	68'7	69'0	69'7	70'5	71'2	71'7	72'3	73'0	73'6	73'7	74'0
12	73'2	73'3	74'2	74'9	75'2	75'9	76'0	75'8	75'4	75'3	75'0	75'2
13	—	—	—	—	—	—	—	—	—	—	—	—
14	74'0	74'0	74'3	74'5	75'5	76'6	77'0	77'3	78'0	78'5	78'5	78'5
15	73'1	72'5	72'5	72'5	72'3	72'3	71'7	71'5	71'5	71'7	71'5	71'7
16	65'5	65'5	66'0	66'6	67'3	67'6	67'6	67'6	67'8	68'3	68'5	68'4
17	65'7	65'5	65'3	65'0	65'0	65'5	65'5	65'5	65'5	65'6	65'6	65'5
18	64'2	63'9	63'7	64'4	65'1	65'6	66'0	66'5	66'6	67'3	67'5	67'7
19	63'7	64'0	64'6	65'0	65'7	66'5	66'8	67'7	68'5	69'5	69'5	69'7
20	—	—	—	—	—	—	—	—	—	—	—	—
21	65'5	65'1	64'6	64'4	64'5	64'3	64'2	64'6	64'7	65'2	65'4	65'5
22	66'0	64'8	63'7	63'4	63'5	63'7	64'0	64'0	64'5	65'4	65'7	65'6
23	61'8	61'8	62'6	63'1	63'6	64'6	65'2	66'1	66'6	67'3	67'9	68'5
24	69'3	68'2	68'0	67'7	67'7	67'7	68'1	68'0	68'0	67'6	67'6	67'5
25	63'7	63'0	63'0	62'5	62'5	62'3	62'3	62'0	62'0	62'3	62'5	62'8
26	60'2	60'3	60'3	60'7	61'2	61'8	62'0	62'5	62'4	62'5	62'7	62'7
27	—	—	—	—	—	—	—	—	—	—	—	—
28	56'9	56'7	57'0	57'2	58'0	58'5	58'9	59'3	59'4	60'0	60'5	60'6
29	60'3	60'5	60'9	61'0	61'6	62'7	63'4	63'6	64'0	64'5	64'5	64'5
30	62'5	62'9	63'7	64'6	64'6	65'4	65'6	65'7	66'5	67'0	67'3	67'3
Hourly Means	68'22	68'14	68'34	68'61	68'98	69'44	69'68	69'90	70'15	70'51	70'65	70'69

^a Forty minutes late.^b Thirteen minutes late.

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VERTICAL FORCE.														Daily and Monthly Means.
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.														
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.			
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
160.8	161.7	161.9	161.8	164.0	163.9	163.9	163.2	162.6	164.1	162.6	164.1	163.1	163.11	
157.1	157.3	159.2	159.4	159.5	160.7	160.2	160.1	158.7	159.0	163.1	163.6	160.52		
164.9	164.9	164.7	164.7	164.7	164.7	143.0	164.8	151.2	129.8	144.2	139.7	160.22		
172.5	172.6	173.5	168.4	163.3	165.6	162.5	142.6	140.4	139.7	140.6	143.6	159.01		
175.5	167.8	162.8	151.2	159.2	164.2	—	—	—	—	—	—	—	167.75	
—	—	—	—	—	—	—	166.5	165.5	167.1	168.2	167.1	170.4		
159.1	159.6	159.2	159.0	161.9	161.6	159.1	150.7	152.2	149.1	154.5	153.6	160.01		
171.4	171.4	174.0	173.3	173.4	170.6	174.0	174.9	174.9	175.0	176.5	174.6	171.77		
183.1	181.9	182.4	182.3	182.3	182.3	182.3	183.7	182.8	182.2	182.2	183.5	181.55		
184.8	184.7	180.4	—	179.6	180.0	180.0	178.6	169.8	159.9	158.5	174.0	178.69		
176.2	170.7	167.3	172.8	158.9	163.1	164.3	165.5	153.0	133.5	156.5	168.8	166.80		
171.6	168.9	168.4	166.2	166.7	167.7	—	—	—	—	—	—	—	164.89	
—	—	—	—	—	—	—	162.7	159.8	133.9	144.0	157.8	159.5		
165.8	165.8	166.5	163.5	156.8	159.5	126.6	153.9	154.6	159.1	145.2	165.7	161.44		
175.6	175.2	175.5	175.5	180.9	177.0	176.9	179.6	179.6	180.9	180.9	181.6	174.85		
180.3	180.3	180.1	182.3	182.3	178.7	176.4	181.1	181.0	179.9	178.6	173.7	180.23		
187.2	187.7	187.7	185.6	185.6	185.5	185.7	185.6	186.2	182.7	184.4	184.0	183.87		
180.3	180.4	181.7	181.5	180.3	181.4	182.7	184.2	184.3	185.2	179.6	180.7	182.44		
178.9	176.8	176.8	178.0	178.8	177.7	—	—	—	—	—	—	—	180.22	
—	—	—	—	—	—	—	177.5	167.8	176.1	177.0	180.7	180.7		
187.7	199.6	203.9	203.7	189.6	191.5	200.0	167.5	182.6	151.2	131.2	129.3	182.09		
210.3	196.4	193.9	192.4	188.8	183.3	168.6	186.3	184.5	181.0	180.6	191.8	190.38		
190.2	184.2	182.1	180.8	185.7	180.6	159.1	178.8	177.2	180.2	175.4	175.6	184.77		
182.7	181.5	180.7	180.1	180.6	181.4	181.4	182.9	183.5	183.5	182.7	179.1	180.93		
189.7	189.7	190.4	189.4	184.9	186.4	180.7	181.8	181.8	178.4	169.4	185.4	185.78		
189.3	189.1	186.6	186.6	186.6	186.6	—	—	—	—	—	—	—	189.38	
—	—	—	—	—	—	—	189.3	185.1	191.2	193.6	195.9	195.2		
191.5	192.2	192.1	192.2	191.9	192.5	192.0	192.2	192.4	192.2	192.3	192.0	193.55		
184.4	184.5	184.5	183.8	184.5	186.0	185.9	186.7	187.4	187.1	185.9	186.51	186.51		
180.5	184.5	184.4	186.6	183.4	182.1	183.0	176.3	177.0	180.3	182.0	181.3	182.22		
178.90	178.05	177.72	176.84	176.01	175.95	173.24	173.05	171.77	169.11	169.55	172.98	175.88		
TEMPERATURE OF THE VERTICAL FORCE MAGNET.														
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.			
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
79.0	78.8	78.5	78.5	78.1	77.8	76.5	77.0	76.8	76.7	76.7	76.7	77.06		
79.5	79.7	79.5	79.0	78.8	78.5	78.3	78.1	77.6	77.2	77.2	77.3	77.97		
76.0	76.0	76.2	76.0	75.5	75.3	75.5	75.5	75.5	75.5	75.5	74.8	76.03		
76.7	76.5	76.5	76.5	76.5	76.4	76.3	76.1	76.2	76.2	76.0	76.0	76.12		
78.0	78.5	78.5	78.2	78.2	77.0	—	—	—	—	—	—	—	76.70	
—	—	—	—	—	—	75.4	75.3	75.0	74.8	74.6	74.5	—		
80.0	80.5	80.0	80.0	79.3	79.0	78.4	77.6	77.3	76.3	76.0	75.8	78.05		
73.7	73.7	73.3	72.6	72.0	71.0	71.0	70.0	69.4	69.0	68.5	68.1	73.15		
68.6	68.5	68.3	68.3	68.2	67.8	67.6	67.3	67.1	67.0	67.0	66.7	68.02		
69.5	69.6	69.7	—	69.5	69.4	69.0	69.0	69.0	69.0	68.7	68.5	68.61		
74.4	74.5	73.3	74.0	74.2	74.2	73.7	73.5	73.2	73.1	72.5	72.5	72.45		
75.0	75.5	75.2	74.7	74.5	74.3	—	—	—	—	—	—	—	75.03	
—	—	—	—	—	—	75.3	75.7	75.7	75.5	75.5	74.5	—		
78.7	78.8	78.8	78.6	78.6	78.4	77.7	77.0	76.3	75.5	74.7	73.8	76.82		
71.7	71.0	70.6	70.3	70.0	69.5	69.1	68.8	68.5	68.0	67.3	67.4	70.71		
68.1	68.1	67.7	68.0	67.8	67.5	67.4	67.0	67.0	66.6	66.0	65.7	67.23		
65.5	66.0	65.6	65.5	65.0	65.0	64.7	64.5	64.5	64.5	64.4	64.0	65.18		
67.7	67.5	67.7	67.4	67.2	67.0	67.0	65.5	65.4	65.0	64.7	64.4	66.04		
69.7	70.0	70.2	69.5	69.4	69.0	—	—	—	—	—	—	—	67.70	
—	—	—	—	—	—	68.0	68.0	68.0	67.8	67.4	66.5	—		
65.5	65.5	65.2	64.8	64.6	65.0	64.8	65.0	64.8	64.5	63.8	66.4	64.91		
65.6	65.4	65.5	65.0	64.8	64.5	64.5	64.0	63.7	63.5	63.3	62.6	64.45		
68.6	70.0	70.3	70.5	70.0	70.5	70.0	69.7	70.1	70.0	69.8	69.5	67.42		
67.0	67.0	66.5	66.5	66.3	66.0	66.0	65.2	65.0	64.7	64.5	65.7	66.91		
62.0	61.7	61.7	61.5	61.5	61.3	61.2	61.0	60.7	60.6	60.6	60.5	61.88		
62.5	62.5	62.5	62.5	62.4	62.2	—	—	—	—	—	—	—	60.98	
—	—	—	—	—	—	58.7	58.5	58.7	58.3	58.0	57.5	—		
61.0	61.2	60.8	60.8	61.0	60.6	60.4	60.5	60.8	60.5	60.4	60.5	59.65		
64.6	64.6	64.7	64.6	64.5	63.8	63.7	63.5	63.2	63.0	63.2	62.9	63.24		
67.3	67.0	66.8	66.8	66.5	66.4	66.2	65.5	65.5	65.3	64.9	64.6	65.66		
70.61	70.70	70.52	70.40	70.17	69.90	69.48	69.18	69.04	68.77	68.51	68.36	69.54		

* Four minutes late.

VERTICAL FORCE.											
One Scale Division = .000066 parts of the V. F. Increase, in Scale Division, corresponding to 1° decrease of Temperature, 1°.64.											
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.
OCTOBER.	1	183.2	184.7	185.2	189.5	186.5	186.7	186.3	187.4	181.9	189.8
	2	184.7	184.7	189.0	191.6	191.6	191.0	193.1	198.3	198.3	204.4
	3	198.4	199.2	198.9	196.4	194.7	194.5	195.7	191.7	193.8	192.3
	4	—	—	—	—	—	—	—	—	—	—
	5	197.4	198.7	197.7	196.3	195.2	192.1	190.4	190.3	189.9	189.6
	6	192.4	192.0	192.1	189.7	190.4	190.4	189.5	190.9	190.3	191.8
	7	189.3	189.3	190.9	186.9	181.9	184.9	184.2	187.5	193.0	194.4
	8	159.3	134.7	140.3	172.6	182.9	183.4	188.5	193.8	186.8	186.3
	9	186.7	186.7	185.4	184.3	184.5	184.5	187.0	185.3	186.7	186.7
	10	174.4	176.7	181.8	184.9	191.6	195.4	198.4	197.2	198.0	196.7
	11	—	—	—	—	—	—	—	—	—	—
	12	195.5	193.2	193.4	193.2	191.7	191.5	191.5	193.2	194.9	190.9
	13	190.7	190.5	191.6	191.2	192.3	192.0	191.6	195.5	196.7	196.7
	14	197.6	198.4	197.7	196.4	195.3	195.5	197.3	196.9	196.9	196.9
	15	198.7	197.7	200.0	196.6	195.7	195.6	196.8	198.4	197.9	196.2
	16	197.6	198.0	199.1	199.5	199.0	198.5	197.6	198.8	197.4	198.1
	17	197.7	198.8	201.2	202.1	201.9	201.1	200.6	200.6	202.4	202.3
	18	—	—	—	—	—	—	—	—	—	—
	19	209.5	209.5	207.4	208.3	206.1	204.0	205.6	205.2	204.4	205.4
	20	205.8	204.7	204.7	203.0	201.5	201.3	201.5	201.3	202.6	202.6
	21	205.5	205.2	206.5	205.2	204.4	204.0	203.7	203.0	204.3	202.8
	22	197.7	200.4	200.9	202.5	202.7	201.8	211.4	202.6	207.2	208.7
	23	213.5	213.7	213.8	214.6	214.5	211.0	211.0	211.9	208.7	209.0
	24	208.8	208.8	208.7	207.0	204.2	203.6	203.6	203.2	204.7	204.8
	25	—	—	—	—	—	—	—	—	—	—
	26	209.0	208.5	208.5	209.2	207.4	206.3	205.1	203.3	203.6	201.7
	27	196.3	197.7	198.3	198.5	197.8	197.2	197.2	196.7	197.2	198.8
	28	201.4	204.2	200.9	202.2	202.8	201.5	202.1	202.1	202.5	200.5
	29	204.2	204.7	203.9	204.2	202.8	202.8	201.4	201.5	202.5	202.5
	30	203.0	200.9	202.8	202.1	204.5	204.5	204.2	204.2	204.8	205.3
	31	207.5	208.6	208.8	208.8	208.9	208.2	208.2	208.2	209.4	209.4
Nov. 1	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	196.51	195.93	197.39	197.66	197.62	197.16	197.91	198.08	198.49	198.82
TEMPERATURE OF THE VERTICAL FORCE MAGNET.											
OCTOBER.	1	61.4	63.8	63.4	63.3	62.7	62.8	63.0	62.8	63.5	63.4
	2	59.0	58.8	58.6	58.6	58.5	58.5	59.0	59.1	59.2	59.3
	3	57.0	57.5	56.0	57.1	57.5	57.7	58.5	59.0	59.0	59.3
	4	—	—	—	—	—	—	—	—	—	—
	5	57.0	57.0	57.8	57.6	57.6	58.7	59.6	60.1	60.6	61.5
	6	58.6	58.6	58.8	60.5	60.3	61.0	61.4	62.3	62.5	63.0
	7	60.8	60.9	61.5	62.5	63.5	64.0	64.5	65.1	65.5	65.7
	8	66.4	65.6	65.8	65.6	66.0	66.3	66.3	66.3	66.2	66.0
	9	64.0	64.0	64.0	64.3	65.3	66.0	66.3	66.6	66.1	65.6
	10	59.5	59.3	59.1	59.6	59.3	59.3	59.0	59.2	59.4	59.3
	11	—	—	—	—	—	—	—	—	—	—
	12	56.5	56.9	56.5	58.8	59.2	60.0	60.0	60.5	60.6	61.5
	13	61.0	60.8	60.6	60.5	60.2	60.3	60.3	60.0	59.6	59.2
	14	56.0	56.3	56.3	56.8	57.2	57.7	58.0	58.2	58.2	58.6
	15	57.0	57.0	57.0	57.8	58.2	58.2	58.2	58.3	58.2	58.7
	16	56.4	56.5	56.5	57.2	56.4	57.1	57.5	57.9	57.9	58.3
	17	56.7	56.2	55.7	55.2	55.0	55.2	55.3	55.4	55.4	55.4
	18	—	—	—	—	—	—	—	—	—	—
	19	48.9	49.1	52.0	50.2	51.0	51.5	51.9	52.0	52.4	53.0
	20	53.1	53.0	52.7	52.6	53.2	53.5	54.2	54.4	54.4	54.5
	21	51.4	51.6	52.2	51.6	52.2	52.4	53.0	53.1	53.1	53.6
	22	55.7	55.0	53.3	53.4	53.3	53.8	53.2	53.0	52.6	52.4
	23	48.4	48.3	48.0	47.6	48.1	48.4	49.0	49.0	49.5	50.0
	24	50.1	50.2	50.2	50.6	51.6	52.0	52.6	52.8	53.4	53.8
	25	—	—	—	—	—	—	—	—	—	—
	26	50.0	50.0	50.0	50.2	50.4	51.4	52.0	53.0	53.4	54.2
	27	57.0	56.8	57.0	56.2	56.2	57.0	57.2	57.3	57.4	57.8
	28	53.4	53.0	54.0	54.0	53.0	52.9	52.7	52.3	52.6	53.2
	29	52.2	52.0	51.5	51.6	52.1	52.4	53.1	53.3	53.7	54.0
	30	51.3	51.3	51.1	50.6	50.7	51.0	51.1	51.4	51.3	51.4
	31	49.2	49.0	49.0	49.0	48.7	48.5	48.7	48.4	48.2	48.2
Nov. 1	—	—	—	—	—	—	—	—	—	—	—
Hourly Mean	—	55.96	55.80	56.24	56.04	56.18	56.57	56.83	57.06	57.14	57.40

* Twenty-five minutes late.

Three minutes late.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
189°3	188°3	189°1	188°9	189°0	189°4	187°3	187°9	188°1	188°1	189°6	184°4	186°83
214°3	221°4	202°5	184°7	187°9	190°0	184°4	176°8	176°8	194°7	192°6	192°4	194°26
191°7	192°5	192°5	193°7	194°0	193°4	—	—	—	—	—	—	194°87
187°2	188°1	188°6	188°7	189°1	189°1	190°1	191°1	191°1	190°4	187°8	189°5	191°03
187°2	189°2	188°2	188°4	187°8	185°6	183°9	186°9	186°5	186°3	182°4	182°8	188°58
190°5	190°5	197°2	156°0	171°6	164°7	126°9	165°6	156°8	163°9	179°6	175°6	179°38
190°5	190°2	189°3	184°8	180°5	180°8	172°9	166°1	177°1	181°5	185°9	185°6	179°49
188°9	188°9	186°8	197°0	190°3	181°0	178°3	168°4	159°2	164°0	169°4	169°9	182°38
195°0	194°1	188°3	187°8	190°3	190°4	—	—	—	—	—	—	190°26
—	—	—	—	—	—	199°5	201°2	191°0	176°6	172°3	193°9	—
191°4	191°1	191°1	189°8	191°1	191°1	190°2	189°0	191°3	191°7	188°5	190°4	191°59
198°0	201°1	201°4	195°8	198°8	198°0	196°2	192°6	195°4	195°4	197°5	196°6	195°46
198°6	198°7	195°9	196°6	196°6	196°7	196°9	198°4	198°4	199°2	198°3	197°5	197°20
195°1	199°5	199°5	198°8	189°1	193°5	196°7	195°7	198°4	196°3	191°0	195°0	196°41
195°1	194°9	191°4	192°1	193°8	193°8	193°7	192°9	196°0	197°5	196°9	196°5	196°23
197°8	196°5	198°9	201°2	204°0	203°7	—	—	—	—	—	—	202°80
—	—	—	—	—	—	209°8	209°5	209°3	211°2	207°6	209°5	—
225°2	236°5	216°6	215°0	197°8	204°7	205°6	206°1	206°1	200°7	200°6	205°8	208°75
204°0	204°3	204°8	204°8	204°9	204°9	204°9	204°9	204°9	206°3	205°3	205°5	204°13
206°3	201°4	204°2	203°9	201°3	205°1	201°4	204°8	203°6	203°4	186°7	193°0	203°29
211°8	210°7	210°7	207°4	206°8	210°1	210°0	208°0	207°3	203°2	204°7	208°5	206°43
208°7	207°3	208°1	208°4	208°4	201°3	205°3	205°2	207°1	208°6	208°7	208°8	209°58
203°1	206°1	205°6	198°9	204°9	205°4	—	—	—	—	—	—	205°40
—	—	—	—	—	—	207°4	207°2	206°9	206°9	206°9	209°0	—
201°5	209°5	198°9	199°5	199°5	198°9	198°6	198°9	198°9	198°1	196°3	196°2	202°10
198°5	198°5	195°4	199°2	198°9	198°2	191°9	195°0	197°6	199°0	199°2	201°8	197°70
201°8	202°6	204°2	203°2	202°3	202°2	204°1	202°4	202°1	200°3	200°6	202°9	202°12
201°0	201°6	202°5	202°4	202°5	195°2	201°1	201°1	204°9	204°4	204°5	203°8	202°44
206°9	206°9	208°5	210°2	208°6	208°7	205°5	200°1	201°5	206°2	206°2	207°0	205°18
210°9	209°3	210°5	210°3	210°3	210°4	—	—	—	—	—	—	208°79
—	—	—	—	—	—	208°8	208°4	208°0	207°0	205°7	206°6	—
199°68	200°62	198°91	196°56	196°45	195°57	194°01	194°84	194°84	195°46	195°03	196°54	197°14

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

62°4	62°1	61°8	61°5	61°1	60°6	60°4	60°2	60°0	59°7	59°2	59°0	61°97
60°0	60°0	59°8	60°3	60°0	59°2	58°8	58°6	58°4	58°0	57°7	57°0	59°00
59°8	59°8	59°5	59°5	59°5	59°4	—	—	—	—	—	—	58°17
—	—	—	—	—	—	56°7	57°0	57°2	57°2	57°0	56°8	—
62°6	62°6	62°4	61°8	61°4	61°4	61°0	60°7	60°4	60°0	59°7	59°2	60°22
63°2	63°0	62°8	62°7	62°7	62°5	62°0	61°8	61°7	61°5	61°0	61°0	61°71
69°5	66°5	66°3	66°8	67°0	66°6	66°6	66°4	66°5	66°4	66°2	66°0	65°18
65°5	65°5	65°1	65°0	64°9	64°7	64°6	64°6	64°5	64°5	64°5	64°6	65°42
63°8	63°5	63°1	63°0	63°1	62°6	62°1	61°9	61°7	61°4	60°8	60°0	63°69
39°8	60°0	60°0	59°7	59°0	58°9	—	—	—	—	—	—	—
—	—	—	—	—	—	57°2	57°2	57°2	57°2	57°3	56°7	58°84
61°8	62°0	62°0	61°9	61°7	61°5	61°5	61°5	61°5	61°2	61°0	61°0	60°94
58°5	58°0	57°8	57°4	57°3	57°2	57°2	57°1	56°9	56°9	56°7	56°0	58°63
58°3	58°2	58°1	58°0	57°6	57°4	57°1	57°4	57°3	57°3	57°5	57°4	57°61
59°0	58°3	58°0	57°8	57°8	57°5	57°2	56°9	57°0	57°0	57°0	56°8	57°79
59°2	59°2	59°5	59°8	60°0	59°8	59°7	59°5	59°0	58°5	58°2	57°3	58°30
54°8	54°7	54°5	54°2	53°8	53°5	—	—	—	—	—	—	—
—	—	—	—	—	—	49°2	49°0	49°0	49°2	49°0	48°7	53°57
53°4	53°4	53°2	53°2	53°0	53°0	53°0	53°0	52°7	52°7	52°7	53°1	52°30
54°2	54°0	53°6	53°1	53°0	52°7	52°4	52°7	52°5	52°2	52°2	51°8	53°28
54°2	54°4	54°4	55°2	55°2	55°0	54°5	54°2	54°6	54°4	54°6	54°7	53°60
51°7	51°4	51°2	51°0	50°8	50°3	50°2	49°5	49°2	49°2	49°2	48°4	51°76
50°2	50°6	50°8	51°0	50°8	50°5	50°5	50°6	50°3	50°2	50°2	50°0	49°57
54°0	53°8	53°6	53°2	53°2	53°0	—	—	—	—	—	—	51°85
—	—	—	—	—	—	50°2	50°0	50°0	50°0	49°9	50°0	—
54°5	54°6	55°2	55°3	55°3	55°4	55°5	55°8	56°2	56°3	56°6	56°8	53°79
56°7	56°9	56°3	56°7	56°3	56°1	55°7	55°4	55°2	55°0	54°5	54°2	56°40
54°0	53°8	53°6	53°0	53°0	52°9	52°4	52°4	52°2	52°0	52°0	52°2	53°02
53°8	53°8	53°9	53°4	53°0	52°8	52°8	52°8	52°2	51°9	51°7	51°3	52°82
51°4	51°2	51°2	51°0	50°6	50°3	50°2	49°8	49°7	49°5	49°4	49°2	50°75
48°4	48°4	48°4	48°2	48°2	48°0	—	—	—	—	—	—	—
—	—	—	—	—	—	50°0	50°2	50°4	51°0	51°3	51°6	49°07
57°47	57°40	57°26	57°17	57°01	56°78	56°27	56°16	56°06	55°95	55°84	55°59	56°64

1°64.

10°.

11°.

Sc. Div.

189°8

205°5

191°2

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188°9

187°5

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VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Guttin- gen Times.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
NOVEMBER.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	206'5	206'2	202'7	200'3	200'5	199'9	201'5	200'5	202'8	204'1	206'8	203'9
3	196'7	196'4	195'6	194'4	195'7	194'4	194'7	194'7	194'7	194'9	194'9	193'1
4	194'8	195'6	193'9	193'7	193'9	193'9	194'4	194'9	194'9	193'7	193'7	193'7
5	197'7	201'5	202'9	200'7	199'3	197'0	196'8	195'4	195'0	194'6	194'0	194'0
6	203'6	203'6	203'6	203'2	200'0	198'6	197'9	199'0	199'8	198'8	198'8	195'9
7	203'3	201'1	202'8	202'1	200'8	198'8	199'5	199'5	201'3	203'9	206'1	205'2
8	—	—	—	—	—	—	—	—	—	—	—	—
9	198'0	196'9	195'0	196'4	193'9	190'6	191'2	192'1	192'2	192'4	191'3	189'7
10	188'4	189'0	189'4	190'4	189'0	185'5	185'5	184'4	185'3	185'3	185'3	186'7
11	189'3	189'3	189'3	190'2	190'9	189'3	188'7	188'6	192'0	191'1	191'6	190'5
12	192'7	192'7	194'3	194'6	194'9	192'9	191'8	192'9	193'7	194'7	192'7	192'9
13	191'8	191'5	194'5	194'1	195'0	194'8	195'0	195'0	194'6	194'6	193'1	193'1
14	193'7	195'1	196'0	196'1	196'3	195'6	195'9	195'6	195'9	195'8	195'8	196'8
15	—	—	—	—	—	—	—	—	—	—	—	—
16	196'6	196'3	196'1	195'0	193'7	192'4	192'9	194'6	194'5	194'5	194'5	195'0
17	195'3	195'3	193'3	193'3	190'7	189'6	189'6	196'7	206'4	201'5	192'7	194'8
18	191'6	196'1	195'9	194'9	193'7	192'1	190'2	192'6	190'7	190'5	191'9	190'5
19	193'5	193'6	195'2	194'7	195'4	195'6	197'1	198'0	198'6	198'1	197'1	196'5
20	201'7	204'1	204'1	205'8	202'7	204'2	204'0	201'0	202'8	202'7	201'1	205'6
21	202'0	202'4	203'9	203'9	202'8	203'2	203'2	202'9	202'7	202'7	201'5	206'2
22	—	—	—	—	—	—	—	—	—	—	—	—
23	211'0	211'2	209'3	209'1	209'2	209'2	209'2	210'9	210'6	209'0	207'7	207'9
24	204'9	204'6	204'7	202'9	203'8	200'0	204'7	203'0	204'7	204'7	204'7	204'9
25	207'2	207'2	212'3	213'7	213'4	216'7	218'3	219'6	219'7	221'0	221'7	221'2
26	219'6	219'2	215'5	218'8	220'0	219'7	221'2	221'2	225'7	226'7	230'8	234'4
27	229'0	220'1	219'2	217'8	218'7	218'7	220'4	220'4	220'5	221'4	221'1	218'0
28	201'0	202'4	200'5	200'0	202'2	202'8	203'1	205'5	204'1	203'7	203'8	203'9
29	—	—	—	—	—	—	—	—	—	—	—	—
30	213'8	212'5	211'8	210'7	212'7	212'6	212'7	213'6	215'6	214'5	214'5	214'7
Hourly Means	200'59	200'96	200'87	200'67	200'37	199'52	199'85	200'54	201'55	201'56	201'09	201'28
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
NOVEMBER.	°	°	°	°	°	°	°	°	°	°	°	°
2	51'6	51'9	52'2	52'2	52'7	53'3	53'6	54'2	54'4	55'0	55'4	55'6
3	56'2	56'0	56'0	56'2	57'4	57'1	57'5	57'7	57'8	58'4	58'2	58'4
4	56'7	56'5	56'0	57'3	57'3	57'3	57'6	58'0	58'2	58'2	58'2	58'0
5	53'0	53'5	54'2	54'4	55'2	55'2	56'0	56'4	57'0	57'4	58'2	58'3
6	52'5	52'2	52'2	52'2	52'6	52'7	53'4	53'8	54'2	54'7	55'0	55'3
7	53'5	53'4	52'5	52'2	52'6	53'4	53'5	53'8	54'0	54'3	54'3	54'4
8	—	—	—	—	—	—	—	—	—	—	—	—
9	55'8	56'2	56'3	56'4	56'9	57'7	58'1	58'1	58'2	58'6	59'0	59'2
10	59'4	59'4	59'0	59'2	59'4	60'0	60'2	60'5	60'5	60'6	60'6	60'6
11	59'2	59'2	59'1	59'1	59'2	59'3	59'3	59'3	59'3	59'5	59'6	59'6
12	58'2	57'6	57'3	57'2	56'8	56'6	56'7	57'0	57'0	57'2	57'3	57'3
13	57'0	57'0	56'6	56'5	56'5	56'5	56'5	56'5	56'6	56'9	57'0	57'0
14	56'0	56'2	56'0	55'4	55'5	55'6	55'6	56'0	55'6	56'0	55'9	56'3
15	—	—	—	—	—	—	—	—	—	—	—	—
16	54'5	54'7	54'7	54'2	54'6	55'3	55'5	55'5	55'7	56'2	56'1	56'0
17	55'3	55'2	55'3	55'8	56'3	56'3	56'3	56'7	56'9	57'3	57'2	57'0
18	57'3	57'2	56'8	56'6	57'2	58'0	58'4	59'2	59'3	59'4	59'1	59'0
19	57'4	57'2	56'8	56'6	56'2	56'3	56'6	55'2	55'2	55'1	54'4	54'7
20	51'2	51'0	50'8	50'4	51'1	51'4	51'5	51'2	52'0	52'2	52'0	53'0
21	52'0	52'0	51'3	50'7	50'9	51'1	51'2	51'4	51'4	51'7	51'8	51'8
22	—	—	—	—	—	—	—	—	—	—	—	—
23	46'2	46'3	47'4	46'6	46'7	47'2	47'4	47'5	48'6	48'6	48'2	48'8
24	49'6	49'8	49'3	49'0	49'4	50'0	50'3	50'4	50'4	50'4	50'4	50'3
25	47'6	47'4	45'2	45'3	44'0	42'8	43'2	41'5	41'1	40'8	40'5	40'0
26	39'4	39'5	40'2	39'4	39'4	39'8	40'0	40'0	40'0	39'9	39'8	39'8
27	39'9	39'7	40'4	40'0	40'0	40'4	40'5	41'4	41'4	41'5	42'0	43'1
28	49'3	49'2	50'5	50'5	49'5	49'4	49'8	49'4	50'0	50'6	51'2	51'0
29	—	—	—	—	—	—	—	—	—	—	—	—
30	43'0	43'0	43'2	43'0	43'4	43'6	43'6	43'6	43'4	43'3	43'5	43'4
Hourly Means	52'51	52'45	52'37	52'26	52'43	52'65	52'88	52'99	53'13	53'36	53'42	53'50

1° 64.		VERTICAL FORCE. One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.												
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
203'9	203'9	204'0	200'0	198'3	198'3	197'4	193'8	194'3	193'4	192'5	191'3	192'5	192'5	199'81
193'1	193'1	192'8	191'7	191'8	192'1	192'4	192'5	192'2	192'8	193'0	195'4	195'4	193'97	193'97
193'7	193'7	193'5	195'2	193'6	195'8	196'1	196'7	194'6	190'3	193'5	198'0	197'7	194'56	194'56
194'0	194'0	195'7	196'3	197'1	195'6	198'9	199'2	193'9	193'0	193'0	198'0	197'9	201'1	197'03
196'8	196'8	197'8	199'0	202'5	202'1	201'1	201'1	200'6	198'9	199'5	203'2	203'2	200'36	200'36
204'4	204'4	204'4	200'6	200'1	199'3	199'3	—	—	—	—	—	—	—	200'95
—	—	—	—	—	—	—	199'0	199'2	198'5	197'7	197'8	198'2	—	200'95
189'7	189'7	189'2	189'2	188'9	189'0	188'0	188'2	189'2	189'4	189'2	189'0	188'9	191'15	191'15
185'3	186'7	186'4	187'8	187'3	189'2	188'9	190'2	188'8	188'6	189'6	188'2	189'1	187'70	187'70
191'6	190'5	190'0	190'6	190'0	189'6	190'6	189'5	190'5	190'5	191'8	191'8	192'7	190'37	190'37
192'7	192'9	191'7	193'0	191'3	193'0	193'0	194'3	194'3	193'9	193'6	192'3	192'4	193'41	193'41
193'1	193'1	193'1	197'2	197'8	197'2	198'5	197'3	196'3	195'6	195'0	193'4	193'3	193'1	194'79
195'8	196'8	196'6	196'5	196'2	195'5	195'4	195'4	—	—	—	—	—	—	196'21
—	—	—	—	—	—	—	196'7	197'8	197'6	197'6	197'4	197'7	—	196'21
191'5	195'0	193'9	193'5	193'6	191'0	195'7	196'4	196'4	195'2	196'3	196'3	196'3	196'3	195'00
192'7	191'8	195'7	195'7	195'7	195'6	184'4	169'5	168'8	168'8	194'7	189'3	173'2	190'26	190'26
191'9	190'5	192'3	193'0	193'9	193'8	193'8	193'8	194'8	194'0	194'0	194'0	193'6	193'06	193'06
197'1	196'5	199'5	199'5	202'0	201'9	202'9	202'8	202'8	202'7	202'6	202'5	203'1	199'23	199'23
201'1	205'6	208'5	207'8	205'6	202'8	203'5	203'4	203'5	199'5	201'5	202'8	202'8	202'6	203'63
201'5	206'2	206'3	206'1	206'1	204'1	204'1	204'3	—	—	—	—	—	—	205'59
—	—	—	—	—	—	—	211'0	210'0	210'7	212'1	211'0	211'0	—	205'59
207'7	207'9	207'8	207'8	207'1	207'8	205'2	206'6	204'8	207'2	207'0	206'1	205'2	204'8	207'99
201'7	204'9	205'8	205'8	204'5	205'1	205'1	206'9	208'7	208'7	208'7	208'7	208'7	209'6	205'33
221'7	221'2	221'2	221'6	221'8	221'5	222'8	222'4	221'8	221'4	221'2	221'3	221'3	219'4	218'74
230'8	234'4	238'1	233'0	228'3	228'5	214'3	220'5	220'4	215'0	203'7	210'4	216'0	220'0	221'71
221'4	218'0	216'2	218'2	215'4	212'8	201'4	205'4	207'4	205'7	204'6	200'3	198'8	198'4	213'57
203'8	203'9	205'3	205'6	205'5	200'6	202'4	202'4	—	—	—	—	—	—	205'42
—	—	—	—	—	—	—	214'5	214'2	214'1	210'0	210'0	212'5	—	205'42
214'5	214'7	214'4	214'3	214'9	219'3	219'2	217'9	216'8	211'3	210'3	214'1	216'6	216'6	214'39
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
201'09	201'28	201'60	201'74	201'21	200'85	200'33	200'22	200'07	199'39	198'62	200'11	200'36	200'12	200'56

TEMPERATURE OF THE VERTICAL FORCE MAGNET.														
55'4	55'6	55'8	55'8	56'2	56'3	56'2	56'7	56'8	57'0	57'0	56'8	56'6	56'4	54'99
58'2	58'4	59'0	59'0	59'2	59'2	59'0	58'6	58'4	58'2	58'0	57'8	57'4	57'2	57'83
58'2	58'0	58'3	58'3	57'8	57'4	57'0	56'7	56'5	56'0	55'3	55'2	54'6	54'2	56'94
58'2	58'3	57'5	57'0	56'6	56'2	56'7	55'2	54'5	54'1	53'7	53'2	53'0	52'7	55'43
55'0	55'3	55'3	55'1	54'7	54'3	54'0	54'0	53'9	53'8	53'5	53'5	53'3	53'1	53'72
54'3	54'3	54'4	54'6	54'6	55'2	55'2	55'1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	53'8	54'2	55'0	55'2	55'3	55'3	54'15
59'0	59'2	59'5	59'6	59'6	59'7	59'8	60'2	60'1	60'0	59'8	59'8	59'8	59'8	58'67
60'6	60'6	60'5	60'7	60'0	59'8	59'8	59'8	59'6	59'6	59'4	59'2	59'2	59'1	59'84
59'6	59'6	59'5	59'4	59'4	59'3	59'2	59'1	58'7	58'6	58'6	58'4	58'2	58'2	59'10
57'3	57'3	57'3	57'2	57'2	56'9	56'7	56'6	56'7	57'3	57'2	57'4	57'6	57'4	57'15
57'0	57'0	57'0	56'8	56'9	57'2	57'1	57'0	57'0	56'8	56'8	56'8	56'9	56'6	56'81
55'9	56'3	56'3	56'4	56'5	56'3	56'3	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	54'8	54'3	54'2	54'5	54'5	54'5	55'62
56'1	56'0	56'4	57'0	57'0	57'0	56'6	56'4	56'2	56'1	56'0	55'7	55'5	55'5	55'77
57'2	57'0	57'0	57'2	57'1	57'2	57'2	57'2	57'3	57'2	57'2	57'2	57'3	57'4	56'75
59'1	59'0	58'6	58'2	58'0	57'9	57'9	57'8	57'7	58'1	58'0	58'0	58'0	57'6	58'05
55'1	54'4	54'7	54'5	53'0	52'7	52'4	52'2	52'1	52'4	52'3	51'5	51'3	51'3	54'27
52'0	53'0	52'7	52'6	52'8	52'4	52'5	52'4	52'5	52'0	51'7	51'7	51'6	51'6	51'85
51'8	51'8	51'6	51'7	51'6	51'4	51'4	51'2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	47'2	47'0	46'8	46'6	46'6	46'0	50'27
48'2	48'8	48'7	49'0	49'2	49'0	48'8	48'7	48'8	48'7	48'5	49'0	49'3	49'7	48'20
50'4	50'3	50'2	49'6	49'3	49'0	48'8	48'0	47'8	47'7	47'7	47'5	47'5	47'6	49'17
40'5	40'0	39'8	39'6	39'5	39'3	39'3	39'3	39'4	39'6	39'6	39'7	39'8	39'6	41'41
39'8	39'8	40'4	40'4	40'4	40'4	40'4	40'3	40'0	40'0	40'0	40'1	40'3	40'2	40'00
42'0	43'1	43'6	44'0	44'7	45'2	46'4	47'3	47'2	47'3	47'5	48'4	49'0	49'2	43'75
51'2	51'0	51'0	50'6	50'4	50'3	50'3	50'2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	42'2	42'0	41'8	42'2	42'4	43'0	48'20
43'5	43'4	42'3	42'5	42'1	41'4	41'0	40'9	41'5	41'4	41'4	41'4	41'4	41'3	42'48
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53'42	53'50	53'54	53'46	53'35	53'24	53'20	53'09	52'43	52'38	52'28	52'27	52'26	52'18	52'82

VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. E. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
DECEMBER.	1	Sc. Div. 216'6	Sc. Div. 216'6	Sc. Div. 215'0	Sc. Div. 218'3	Sc. Div. 218'3	Sc. Div. 218'7	Sc. Div. 219'5	Sc. Div. 221'0	Sc. Div. 220'5	Sc. Div. 217'6	Sc. Div. 217'6
	2	213'7	214'0	214'0	213'7	212'5	209'0	209'7	209'3	208'0	206'8	205'8
	3	203'1	202'2	203'2	203'2	204'4	204'4	204'7	205'5	206'1	205'7	205'7
	4	210'0	210'0	208'0	208'8	208'9	210'3	210'8	211'8	211'3	210'3	211'0
	5	206'9	206'6	207'7	208'3	205'4	206'2	205'5	205'0	205'6	205'5	204'2
	6	—	—	—	—	—	—	—	—	—	—	—
	7	213'5	213'3	212'4	210'7	210'4	210'0	209'3	209'9	210'3	210'1	209'1
	8	203'6	203'9	206'5	204'5	203'2	202'3	202'3	204'2	205'0	205'2	204'4
	9	206'0	205'4	207'3	207'0	205'9	205'7	205'7	205'4	206'7	207'0	208'0
	10	208'1	208'5	209'3	210'1	209'2	210'2	208'7	208'7	210'2	208'2	208'1
	11	207'7	208'7	209'6	208'9	205'2	205'2	207'3	210'3	211'5	211'5	211'3
	12	212'1	214'5	215'7	217'2	218'2	217'2	218'7	217'4	220'0	220'0	219'7
	13	—	—	—	—	—	—	—	—	—	—	—
	14	227'6	230'2	226'1	227'8	226'0	225'1	225'1	225'1	225'2	224'8	224'4
	15	227'0	227'9	222'3	222'3	224'8	224'8	222'9	222'9	222'9	221'2	221'4
	16	216'1	216'1	218'4	217'8	215'6	215'6	213'8	212'1	212'1	211'3	211'8
	17	214'2	214'2	214'2	213'2	212'1	209'8	208'6	208'6	210'4	209'6	209'2
	18	210'3	212'4	210'8	214'1	211'8	211'5	212'4	211'3	209'7	209'3	208'8
	19	207'6	207'4	210'8	209'3	207'8	206'6	207'7	207'7	207'7	207'0	208'2
	20	—	—	—	—	—	—	—	—	—	—	—
	21	216'0	216'1	214'1	213'9	213'7	213'7	213'7	213'0	212'6	210'6	210'9
	22	213'7	213'7	214'0	214'1	214'3	214'3	214'5	217'7	218'5	218'3	218'3
	23	215'2	215'7	215'9	213'1	213'4	214'5	214'5	217'9	216'0	214'9	219'6
	24	208'3	208'3	207'5	208'5	209'6	209'5	208'6	207'8	206'6	206'3	206'2
	25*	—	—	—	—	—	—	—	—	—	—	—
	26	213'0	213'0	213'6	213'7	214'7	213'3	211'8	211'2	211'3	211'4	211'7
	27	—	—	—	—	—	—	—	—	—	—	—
	28	200'3	200'3	200'7	201'9	201'0	201'1	202'8	204'1	204'1	203'9	205'1
	29	205'1	205'7	208'0	208'0	208'1	207'5	209'9	210'1	210'1	209'8	209'1
	30	205'7	205'7	205'1	203'6	201'7	201'7	201'5	201'5	200'4	200'4	200'0
	31	198'4	198'9	198'6	200'7	200'7	200'0	200'0	199'1	199'1	197'9	196'2
Hourly Means												
	210'76	211'13	211'11	211'26	210'65	210'32	210'38	210'72	210'84	210'18	210'22	210'23
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
DECEMBER.	1	41'3	41'2	40'9	40'4	40'0	40'2	40'2	40'2	40'4	40'9	41'2
	2	43'4	43'5	43'5	43'6	44'1	45'4	45'5	46'0	46'4	47'4	47'6
	3	50'6	50'1	49'3	48'4	48'4	47'6	48'4	48'4	48'2	48'0	47'9
	4	44'4	44'4	44'7	44'4	44'7	45'0	45'2	45'0	45'2	45'6	46'2
	5	47'3	47'2	46'9	46'6	46'8	47'5	47'5	47'9	48'0	48'4	48'4
	6	—	—	—	—	—	—	—	—	—	—	—
	7	43'0	43'5	43'2	43'2	43'4	43'8	44'4	44'5	44'7	45'2	45'5
	8	48'7	48'8	48'4	48'2	48'5	49'1	48'7	48'6	48'4	48'6	48'5
	9	47'2	47'2	46'8	46'4	46'0	46'1	46'4	47'1	47'3	47'4	47'7
	10	45'6	45'6	45'1	44'5	44'5	45'2	45'8	46'0	46'5	47'3	47'8
	11	45'8	45'4	45'2	45'4	46'2	46'6	46'0	45'6	45'2	45'2	45'4
	12	43'0	42'6	41'8	41'2	40'5	40'5	40'4	40'4	40'0	40'0	40'0
	13	—	—	—	—	—	—	—	—	—	—	—
	14	32'0	32'3	32'6	33'1	33'2	33'4	33'8	34'1	34'8	35'2	35'9
	15	34'6	34'2	33'9	34'4	34'9	36'0	36'4	36'9	37'4	38'4	39'0
	16	38'0	38'0	37'4	37'4	38'0	38'7	39'1	39'7	39'9	40'2	40'4
	17	40'0	40'0	39'6	39'7	40'8	40'8	41'5	41'8	41'8	41'8	41'8
	18	39'7	39'0	39'1	38'4	38'1	39'0	39'4	39'7	40'7	41'2	41'6
	19	41'9	41'7	41'5	41'5	42'2	42'5	42'5	43'0	42'7	43'0	42'4
	20	—	—	—	—	—	—	—	—	—	—	—
	21	38'1	38'2	38'2	38'2	38'2	38'2	38'7	39'2	40'0	40'2	40'2
	22	40'0	40'2	39'4	39'1	37'1	36'1	35'6	34'9	34'9	35'3	35'8
	23	38'1	38'0	37'4	37'4	37'3	37'2	37'0	37'7	38'5	39'8	40'0
	24	42'2	42'2	42'9	42'2	41'7	42'4	43'4	43'7	44'2	44'4	44'5
	25*	—	—	—	—	—	—	—	—	—	—	—
	26	39'6	39'9	39'4	38'7	39'4	40'0	40'1	40'6	40'6	40'7	40'4
	27	—	—	—	—	—	—	—	—	—	—	—
	28	46'6	46'4	46'1	45'8	45'8	46'1	45'7	45'4	45'4	45'4	45'2
	29	43'6	43'0	42'5	41'8	41'4	41'6	41'6	41'6	41'6	42'2	42'4
	30	43'6	43'8	44'2	44'2	45'0	45'5	45'9	46'4	46'4	46'8	47'3
	31	48'2	48'2	48'1	46'4	46'9	47'4	47'8	47'7	48'0	48'2	48'7
Hourly Means												
	42'56	42'48	42'23	41'95	42'04	42'38	42'58	42'77	42'97	43'34	43'48	43'70

* Christmas Day.

VERTICAL FORCE.

One Scale Division = .000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
218'4	218'4	220'1	218'6	217'7	213'0	213'0	214'7	214'2	213'2	213'2	209'7	216'75
203'7	203'1	202'1	202'2	202'4	200'6	200'0	198'6	199'0	200'3	200'9	201'6	205'65
206'2	207'1	206'8	207'3	207'3	207'7	208'7	209'1	209'6	208'5	208'5	208'5	206'25
209'7	209'3	208'1	206'4	206'2	207'2	207'7	207'4	207'4	207'4	205'0	206'9	208'79
204'4	206'2	205'4	205'5	205'9	205'9	—	—	—	—	—	—	—
—	—	—	—	—	—	217'6	217'1	216'8	215'5	214'2	215'3	208'40
208'1	207'7	206'5	206'6	206'5	205'6	205'6	205'4	204'6	203'7	203'3	203'4	208'09
204'7	205'5	206'3	207'6	207'7	207'3	205'1	205'2	205'2	205'6	205'0	206'0	205'04
211'7	211'5	225'4	218'8	213'0	208'4	206'3	204'0	203'9	207'0	208'4	208'1	208'66
208'6	202'5	207'6	207'3	207'3	209'0	207'1	207'3	207'3	207'0	205'0	205'0	207'79
211'5	211'7	213'0	215'3	214'4	214'4	214'4	212'6	208'5	208'5	212'3	212'2	210'73
220'4	220'1	220'2	221'6	220'3	219'1	—	—	—	—	—	—	—
—	—	—	—	—	—	228'1	227'7	227'5	227'2	227'4	228'4	220'80
222'9	223'7	223'7	223'8	222'2	222'2	223'4	221'4	224'5	224'1	224'5	224'2	224'61
215'4	215'1	213'9	220'2	220'2	215'4	215'4	216'4	220'8	220'8	216'7	216'1	220'30
211'8	211'6	211'6	212'0	211'4	210'8	211'7	212'3	212'3	212'5	213'3	214'2	213'25
208'5	209'7	210'8	210'5	210'5	210'6	210'5	211'6	212'6	214'0	210'2	210'0	210'94
209'1	209'4	209'4	208'7	208'7	208'7	208'7	206'2	206'4	206'8	206'0	207'3	209'45
208'2	208'2	208'2	208'2	208'1	207'4	—	—	—	—	—	—	—
—	—	—	—	—	—	217'2	214'6	217'3	216'9	215'5	215'5	210'00
210'7	213'5	213'0	214'3	211'4	213'5	214'6	214'5	214'7	214'4	214'4	214'1	213'43
217'8	217'8	217'3	214'7	216'1	216'0	214'5	214'2	214'2	213'9	213'7	214'0	215'57
217'4	222'9	215'8	215'2	213'0	198'9	208'0	209'1	206'9	207'0	205'3	205'4	213'08
208'2	207'8	204'0	203'5	202'0	200'0	—	—	—	—	—	—	—
—	—	—	—	—	—	214'7	211'4	215'1	212'6	211'0	212'4	208'25
209'6	209'6	208'7	207'4	203'3	201'2	—	—	—	—	—	—	—
—	—	—	—	—	—	200'0	200'5	200'5	200'6	200'5	200'3	208'00
204'1	205'4	203'2	203'7	204'2	204'2	203'1	204'2	205'6	204'3	203'5	204'1	203'29
208'5	209'0	209'0	209'0	208'8	208'3	207'7	205'7	205'6	205'4	205'1	205'4	207'81
200'0	201'0	201'2	200'8	200'3	200'5	200'0	201'3	201'3	199'5	199'6	198'3	201'30
205'0	205'2	205'0	196'7	197'3	197'4	197'0	197'2	196'7	197'7	196'7	197'0	199'05
210'18	210'50	210'63	210'23	209'47	208'20	210'00	209'60	209'94	209'78	209'20	209'36	210'20

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
41'6	41'2	41'2	42'0	42'0	42'2	42'2	42'3	42'3	42'6	43'3	43'4	41'45
49'3	49'7	50'0	50'2	50'2	50'6	51'0	51'6	51'4	51'2	51'0	50'9	48'01
47'8	47'4	47'2	47'0	46'7	46'5	46'2	45'6	45'4	45'2	45'1	45'0	47'42
46'3	46'3	46'7	47'1	47'2	46'9	46'9	46'7	46'5	46'7	47'0	47'2	45'95
48'4	48'3	48'2	48'0	47'9	47'7	—	—	—	—	—	—	—
—	—	—	—	—	—	40'4	40'9	41'3	41'6	42'3	42'7	46'19
46'2	46'4	46'6	47'1	47'3	47'6	47'7	47'6	47'8	48'4	48'7	48'8	45'85
48'6	48'6	48'4	48'0	48'0	47'6	48'0	48'2	47'8	48'0	48'0	47'4	48'32
47'8	48'0	47'8	47'6	47'6	47'5	47'5	47'2	46'7	46'4	46'2	45'9	47'05
47'6	47'5	47'4	47'4	47'2	46'6	46'4	46'4	46'3	46'2	46'2	46'3	46'39
44'7	44'4	44'3	44'0	44'0	43'6	43'4	43'6	43'4	43'4	43'4	43'2	44'69
40'0	39'8	40'0	39'7	40'0	40'2	—	—	—	—	—	—	—
—	—	—	—	—	—	32'3	32'5	32'4	32'6	32'3	22'1	38'51
36'9	36'3	35'9	36'0	36'5	36'4	36'0	35'8	35'6	35'4	35'4	35'2	34'89
39'4	39'3	39'1	39'3	39'2	39'3	39'8	38'7	38'3	38'1	37'2	37'0	37'46
40'5	40'5	40'5	40'7	40'7	40'5	40'2	40'0	40'0	40'0	40'0	40'0	39'62
41'6	41'6	41'3	41'1	41'0	40'2	40'0	39'9	39'7	39'5	39'9	39'6	40'70
41'7	41'9	42'1	42'4	42'4	42'3	42'4	42'6	42'6	42'4	42'4	42'1	41'03
43'0	43'0	43'2	43'0	43'0	42'8	—	—	—	—	—	—	—
—	—	—	—	—	—	36'6	37'2	37'3	37'8	38'1	38'1	41'27
40'4	39'9	40'0	40'0	40'2	40'0	39'7	39'7	39'8	39'8	39'8	39'9	39'45
37'0	37'6	38'0	38'1	37'9	38'1	38'3	38'2	38'2	38'2	38'4	38'4	37'55
41'6	41'5	40'8	41'4	42'0	42'4	42'2	42'2	42'9	42'6	43'0	43'0	40'21
44'4	44'6	45'2	46'0	46'2	46'4	—	—	—	—	—	—	—
—	—	—	—	—	—	39'1	39'1	38'9	39'0	39'1	39'2	42'72
41'2	41'5	42'0	42'8	43'4	44'2	—	—	—	—	—	—	—
—	—	—	—	—	—	45'4	45'6	45'7	45'5	45'7	47'0	42'10
44'9	44'0	43'6	43'3	43'4	43'4	43'7	43'4	43'5	43'6	43'8	43'7	44'70
42'2	42'2	42'2	42'3	42'4	42'5	42'6	43'0	43'2	43'4	43'6	43'6	42'45
47'0	46'4	46'4	46'6	46'6	46'6	47'0	47'4	47'6	47'6	47'6	47'8	46'27
49'3	49'2	49'4	49'3	48'9	48'8	48'6	48'4	48'4	48'4	48'4	48'4	48'32
43'80	43'73	43'75	43'86	43'92	43'88	42'78	42'84	42'81	42'83	42'92	42'93	43'02

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.												
Mean (Götting- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JANUARY.	1	197.0	197.0	196.5	197.4	196.7	197.1	198.6	198.6	199.0	198.6	199.1
	2	197.8	198.4	199.3	199.3	199.3	198.9	200.0	200.0	200.0	200.0	202.0
	3	—	—	—	—	—	—	—	—	—	—	—
	4	207.5	208.0	207.5	205.4	205.9	206.6	206.2	205.5	205.3	203.6	204.2
	5	199.7	199.1	199.5	200.0	198.4	199.7	203.9	203.9	200.6	200.0	200.5
	6	203.2	203.2	201.3	201.4	200.6	201.7	201.5	202.6	202.0	201.0	199.8
	7	200.0	200.0	200.7	200.7	200.5	201.7	201.9	202.3	195.7	196.3	203.7
	8	212.0	215.7	216.6	215.0	215.6	218.7	220.0	222.5	221.0	220.0	219.2
	9	223.4	223.4	220.0	220.0	220.0	220.6	217.7	217.4	218.5	218.8	219.3
	10	—	—	—	—	—	—	—	—	—	—	—
	11	225.5	227.4	228.8	226.0	225.3	225.2	227.3	228.2	228.2	229.3	229.5
	12	225.0	225.8	223	223.2	220.6	219.5	219.5	220.1	219.2	217.4	215.6
	13	214.7	214.7	215.0	213.6	213.6	211.4	210.0	211.2	211.1	208.4	205.5
	14	200.3	200.6	200.6	200.0	198.3	197.4	197.6	197.7	198.5	197.4	196.6
	15	193.2	193.3	194.6	194.5	194.5	194.9	193.4	192.5	192.4	192.5	191.8
	16	189.4	189.6	190.5	191.6	192.4	194.1	195.1	197.7	197.7	198.3	198.5
	17	—	—	—	—	—	—	—	—	—	—	—
	18	213.0	212.6	212.1	212.1	211.1	211.1	208.2	207.4	207.4	205.3	205.4
	19	213.4	213.1	213.4	211.9	213.3	213.8	215.8	215.4	215.4	214.3	214.3
	20	215.1	215.1	215.1	215.1	215.2	214.1	215.4	215.4	215.4	214.9	213.9
	21	208.9	210.5	210.1	210.0	213.7	215.6	215.0	214.5	216.4	217.4	218.9
	22	220.1	220.1	219.9	216.5	218.2	219.4	220.5	220.5	218.9	220.9	219.8
	23	221.7	220.1	218.7	217.1	216.0	214.2	213.1	212.5	211.7	210.0	206.7
	24	—	—	—	—	—	—	—	—	—	—	—
	25	214.5	214.5	214.5	212.8	210.6	210.0	210.0	210.6	210.3	209.1	207.9
	26	206.6	206.6	206.6	204.0	203.1	201.2	200.9	198.5	199.9	199.9	199.9
	27	206.6	207.4	205.7	207.1	208.1	208.4	208.8	208.1	209.1	209.6	210.5
	28	214.7	216.7	216.5	215.3	216.3	214.9	211.0	213.1	211.0	209.3	208.1
	29	208.6	206.7	203.8	202.6	206.3	205.0	205.0	202.8	203.4	205.0	207.1
	30	207.2	207.2	208.6	206.8	205.7	203.5	206.9	207.8	218.1	225.2	225.3
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		209.20	209.49	209.20	208.44	208.43	208.39	208.81	208.81	208.91	209.78	208.83
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
JANUARY.	1	48.4	48.3	48.0	48.1	48.1	48.2	47.5	47.9	47.4	47.4	47.2
	2	46.7	46.6	46.3	46.0	45.8	46.2	46.2	46.3	46.6	47.0	47.1
	3	—	—	—	—	—	—	—	—	—	—	—
	4	43.0	42.8	42.9	42.8	42.7	42.8	43.1	43.6	44.1	44.4	44.6
	5	47.2	46.8	46.2	45.7	46.3	46.4	45.0	44.9	46.2	46.8	46.7
	6	45.6	45.5	45.4	45.0	45.3	46.0	46.3	46.3	46.1	46.9	47.5
	7	46.6	46.6	46.5	46.1	46.2	46.3	46.4	45.6	45.0	45.0	44.8
	8	38.7	38.0	37.3	37.3	37.1	37.4	36.7	36.0	35.4	35.5	35.7
	9	34.3	34.1	34.0	33.8	34.0	34.6	35.2	36.0	36.0	36.5	36.9
	10	—	—	—	—	—	—	—	—	—	—	—
	11	29.3	29.5	29.8	29.8	30.1	30.8	30.1	29.1	29.0	28.8	29.5
	12	30.1	29.7	30.1	30.5	31.1	32.1	32.8	33.4	33.9	35.0	35.8
	13	36.2	36.3	36.1	36.2	35.1	38.6	40.0	39.7	40.7	42.0	42.4
	14	45.0	45.0	45.0	45.1	45.4	46.6	47.0	47.6	47.7	47.8	47.8
	15	49.8	49.4	49.0	48.6	48.4	48.8	49.4	50.0	50.3	50.4	50.5
	16	50.8	50.4	50.0	49.4	48.8	48.6	47.6	46.9	46.5	45.9	44.8
	17	—	—	—	—	—	—	—	—	—	—	—
	18	37.8	38.0	38.1	38.1	38.4	39.1	39.7	40.0	40.2	40.4	41.6
	19	39.2	38.7	38.7	38.1	37.7	37.2	37.1	37.1	36.9	36.8	36.5
	20	34.0	34.0	34.0	34.3	34.6	35.3	35.9	35.9	36.2	36.4	36.1
	21	39.1	39.1	39.1	38.4	37.4	37.1	36.9	36.6	36.9	36.6	36.2
	22	31.2	31.2	31.3	31.9	31.6	31.6	32.1	31.5	31.9	32.1	32.4
	23	32.8	33.0	33.4	33.9	34.6	35.5	36.2	37.8	38.1	39.0	39.5
	24	—	—	—	—	—	—	—	—	—	—	—
	25	36.2	36.1	35.8	36.8	37.6	38.1	38.1	38.3	39.1	39.5	39.7
	26	40.5	40.7	41.0	41.4	41.7	42.6	43.4	43.6	43.9	44.2	44.0
	27	40.2	40.4	39.8	39.8	40.0	39.8	39.3	39.7	39.1	38.1	37.6
	28	35.0	34.6	34.2	34.4	34.4	35.1	35.8	36.1	36.7	37.8	38.2
	29	39.1	39.3	39.5	39.9	39.4	39.7	40.0	40.7	41.4	42.0	41.6
	30	40.0	40.0	40.0	39.9	40.1	40.4	40.5	40.6	40.4	40.6	40.4
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		39.88	39.77	39.67	39.67	39.77	40.19	40.32	40.43	40.62	40.89	41.00

* Twenty minutes late.

* Twelve minutes late.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 198'8 200'0	Sc. Div. 198'8 200'0	Sc. Div. 199'3 200'0	Sc. Div. 199'2 200'0	Sc. Div. 199'2 200'0	Sc. Div. 198'8 200'0	Sc. Div. 199'2 200'0	Sc. Div. 199'4 200'0	Sc. Div. 199'4 200'0	Sc. Div. 199'2 200'0	Sc. Div. 195'0 197'8	Sc. Div. 197'8 201'85	Sc. Div. 198'26 201'85
204'2	204'3	203'8	204'5	202'1	202'2	202'2	207'8	209'6	207'4	206'7	207'2	201'85
200'9	201'8	198'1	197'0	197'9	198'4	198'4	207'8	209'6	207'4	206'7	207'2	201'85
197'4	198'4	200'5	201'8	203'4	202'3	202'3	201'6	201'4	201'9	202'9	202'6	203'22
205'6	206'2	208'1	207'9	208'2	209'8	210'4	210'5	210'5	210'8	210'7	212'0	200'25
219'2	219'2	220'4	220'4	220'1	221'9	221'9	220'6	221'5	221'5	221'5	221'7	201'18
219'0	218'8	218'8	220'4	220'4	220'1	225'0	225'8	225'5	225'2	225'1	222'4	204'83
226'0	225'0	223'0	220'6	222'5	223'1	225'0	225'8	225'5	225'2	225'1	222'4	219'44
215'7	215'7	220'3	216'9	217'7	217'4	214'6	216'4	216'4	217'0	214'7	214'7	221'07
205'7	205'7	205'7	206'1	205'6	204'9	204'6	204'7	204'7	204'9	202'9	200'7	225'85
195'4	197'1	196'1	196'0	195'5	195'5	190'3	192'6	192'6	194'1	194'1	193'3	218'59
194'9	191'0	190'6	190'1	189'9	189'9	189'9	190'4	190'6	190'4	190'1	190'1	208'16
201'2	201'8	202'0	203'5	204'3	204'4	215'7	215'5	215'0	215'0	213'5	214'5	196'45
205'3	204'3	203'6	203'8	205'1	206'1	206'1	207'5	206'6	208'5	207'6	207'3	191'97
214'5	214'5	214'6	215'1	215'3	215'9	216'6	216'6	216'4	216'4	215'1	215'1	201'66
212'3	210'1	209'0	208'8	210'2	206'1	208'4	207'6	207'5	209'2	212'8	210'1	207'62
218'9	218'1	218'1	218'2	218'1	218'7	220'0	219'0	220'5	220'7	220'0	221'1	214'77
221'1	220'4	221'3	218'3	220'3	223'2	223'2	222'4	222'6	222'1	221'0	221'7	212'30
207'1	207'7	207'8	207'8	208'0	208'0	213'7	215'3	215'4	215'5	214'5	214'7	216'73
208'3	208'5	207'0	206'3	205'9	205'9	206'1	205'8	206'6	206'6	206'6	206'6	221'72
201'4	202'5	204'0	204'0	204'2	204'8	204'5	204'5	205'7	205'7	206'0	206'3	208'89
210'3	210'1	211'4	212'1	212'1	213'2	212'3	212'3	213'2	213'1	213'5	213'7	203'38
208'0	208'0	210'0	209'5	210'6	210'4	210'3	205'5	205'1	203'9	207'7	209'7	210'25
210'7	210'8	207'7	206'2	205'7	206'1	207'9	207'7	206'8	207'3	207'4	207'1	210'74
220'3	219'4	219'4	221'4	222'0	218'2	220'4	220'3	220'3	213'0	212'8	212'6	206'36
208'58	208'39	208'48	208'30	208'63	208'78	209'27	209'31	209'76	209'67	209'63	209'67	216'59
208'58	208'39	208'48	208'30	208'63	208'78	209'27	209'31	209'76	209'67	209'63	209'67	208'96

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
47'4	47'1	47'3	46'6	46'3	46'0	46'0	46'0	46'4	46'6	46'7	46'6	47'20
47'5	47'5	47'4	47'0	47'0	46'6	46'6	46'6	46'4	46'6	46'7	46'6	45'54
44'5	45'0	45'2	45'0	46'7	46'6	46'6	41'4	42'0	42'5	43'0	42'7	44'91
47'0	47'0	47'0	46'8	46'7	46'6	46'9	46'3	46'2	46'2	46'3	45'8	46'41
48'6	48'5	47'7	47'4	47'0	46'6	46'5	46'4	46'6	46'7	46'9	47'0	46'67
43'7	42'6	42'0	41'4	41'0	40'2	39'7	39'4	39'5	40'0	40'0	40'0	35'30
35'8	35'5	35'3	33'7	33'8	33'9	33'8	33'9	34'0	34'0	34'1	34'2	35'33
35'9	36'3	36'1	36'1	36'0	36'1	30'5	30'3	30'0	29'7	29'4	29'4	34'05
30'6	31'1	31'3	31'0	31'0	30'8	30'5	30'5	30'9	31'0	30'8	30'8	30'19
38'0	37'2	36'6	36'6	36'2	36'0	36'6	36'6	36'3	36'5	36'5	36'3	31'59
42'5	42'2	42'2	42'2	42'2	42'1	42'6	42'8	43'2	43'2	43'6	44'4	40'87
48'4	48'4	48'4	48'6	48'8	48'9	49'1	49'3	49'3	49'3	49'3	45'8	47'56
50'8	50'6	51'2	51'2	51'2	51'2	51'1	50'9	51'0	51'0	51'0	51'0	50'30
44'8	44'1	43'0	41'8	41'0	40'5	35'5	35'6	36'0	36'2	36'6	37'2	43'64
42'2	41'8	42'2	42'2	41'7	41'5	41'1	40'7	40'6	40'5	40'1	40'0	40'30
36'4	36'3	36'2	36'2	36'0	35'1	34'9	34'2	34'0	34'4	34'3	34'0	36'35
39'2	40'0	39'9	39'9	39'7	39'4	39'6	40'0	40'0	39'5	39'3	39'1	37'55
36'0	35'8	34'8	34'6	34'7	34'1	33'9	33'6	32'8	32'3	31'8	31'3	35'61
33'2	33'6	33'2	33'1	32'7	32'3	32'2	32'4	32'3	32'1	32'2	32'5	32'23
40'0	39'7	39'7	39'8	40'0	40'0	35'2	35'2	35'3	35'7	35'9	35'9	36'90
39'7	39'6	39'8	40'5	40'6	40'2	40'0	40'0	40'0	40'0	40'0	40'4	38'98
44'0	43'8	43'3	42'5	42'3	41'6	41'8	42'0	41'4	40'8	40'4	40'0	42'29
37'8	37'4	37'1	37'2	37'1	37'3	37'3	37'3	37'3	36'6	36'3	35'1	38'18
39'4	39'6	39'8	39'9	39'7	39'5	39'3	39'1	38'9	38'8	38'9	38'9	37'63
41'9	42'1	42'4	42'2	42'0	41'9	41'4	40'6	40'4	40'2	40'2	40'0	40'83
41'3	40'6	40'2	39'5	39'3	39'3	35'6	35'6	35'7	36'0	36'5	37'1	39'17
41'41	41'30	41'13	40'88	40'80	40'56	39'92	39'52	39'50	39'52	39'52	39'34	40'28

* Ten minutes late.

VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
FEBRUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	214'2	214'2	212'5	210'1	210'6	212'3	211'2	209'4	208'0	205'8	205'8	203'7
2	198'7	200'4	200'1	199'2	198'6	197'3	196'7	195'6	195'2	196'1	195'5	195'5
3	192'6	196'3	192'9	192'8	191'2	193'2	194'7	194'6	193'6	194'7	194'7	197'7
4	208'0	211'3	215'5	213'2	212'4	211'1	214'4	213'4	212'3	209'7	210'0	208'6
5	211'0	210'4	214'4	213'2	212'1	211'9	210'2	209'5	208'0	206'6	205'0	204'8
6	202'0	203'1	200'0	200'3	202'3	203'2	205'4	206'9	209'9	214'0	212'8	212'8
7	—	—	—	—	—	—	—	—	—	—	—	—
8	203'1	202'8	202'2	198'5	199'7	198'6	199'8	199'9	199'3	200'3	199'2	199'2
9	197'1	198'7	195'3	194'5	193'9	193'7	194'5	195'0	195'1	195'3	197'6	199'1
10	197'9	197'6	197'6	198'1	197'9	195'9	195'0	195'8	195'8	195'8	195'8	195'8
11	200'7	200'6	203'3	202'9	201'6	202'2	202'1	201'3	202'4	202'4	204'3	204'3
12	205'0	205'7	206'0	203'4	201'7	201'8	201'8	200'2	199'8	199'2	199'5	199'7
13	203'9	203'3	204'3	204'1	203'1	201'5	200'0	201'1	201'8	203'4	202'8	201'7
14	—	—	—	—	—	—	—	—	—	—	—	—
15	203'9	204'2	202'2	202'3	202'2	202'2	200'5	200'6	201'7	203'2	202'5	201'0
16	206'7	206'7	208'7	211'5	210'1	210'3	210'1	212'0	211'5	210'3	210'2	210'1
17	207'0	206'6	206'6	205'1	204'7	203'8	202'2	201'4	200'8	199'5	198'7	198'9
18	204'5	204'5	203'2	202'1	200'7	200'3	198'3	198'3	199'0	198'2	197'5	196'4
19	198'4	198'0	198'8	198'8	199'0	198'2	197'1	197'1	197'1	195'8	194'9	194'9
20	195'6	197'5	197'6	196'6	196'1	196'1	198'4	199'0	200'0	199'7	200'0	200'0
21	—	—	—	—	—	—	—	—	—	—	—	—
22	200'9	201'6	202'8	202'8	203'0	204'5	205'5	207'6	209'1	207'1	212'8	214'4
23	213'1	218'0	217'7	215'4	213'7	211'6	211'2	—	210'9	—	—	212'3
24	207'6	213'4	218'1	207'6	208'1	211'5	210'9	211'4	210'9	214'9	213'6	214'3
25	204'3	211'6	209'4	207'2	206'0	205'4	204'3	208'1	205'5	203'7	203'7	201'0
26	207'7	214'1	213'8	212'8	210'3	208'3	206'8	206'5	208'7	205'3	204'5	207'9
27	203'1	203'6	204'7	204'2	203'4	204'5	203'3	201'9	200'8	201'0	201'4	201'4
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	203'58	205'17	205'32	204'03	203'43	203'31	203'08	202'50	203'22	202'70	202'73	203'15
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
FEBRUARY.	°	°	°	°	°	°	°	°	°	°	°	°
1	37'3	37'8	38'1	38'3	38'5	38'7	39'3	39'6	40'6	41'4	42'0	42'2
2	44'7	44'3	45'4	45'4	45'5	46'4	47'0	47'3	47'6	47'7	48'2	48'2
3	49'2	49'0	49'0	48'7	48'9	48'9	48'9	48'7	48'3	48'2	46'9	46'2
4	37'9	37'1	36'6	37'1	36'4	36'5	36'9	37'6	38'1	38'9	39'1	39'3
5	36'3	36'2	36'3	36'2	37'0	37'2	38'0	38'5	39'3	39'8	40'2	40'4
6	39'1	39'0	39'7	39'5	39'9	40'3	39'8	40'2	40'8	41'4	42'0	42'6
7	—	—	—	—	—	—	—	—	—	—	—	—
8	42'8	43'0	43'5	43'8	43'7	44'2	44'6	44'9	45'0	45'4	45'5	45'4
9	46'2	46'2	48'8	47'5	47'2	47'2	47'2	47'2	47'1	47'1	47'1	47'2
10	45'6	45'8	45'9	45'0	45'2	45'8	46'3	46'6	46'6	47'0	47'2	47'4
11	43'4	43'0	42'2	42'3	42'6	42'4	42'6	43'2	42'9	43'0	42'6	42'6
12	41'4	41'4	41'7	42'7	42'6	43'4	43'8	44'3	44'7	45'0	45'1	45'3
13	41'7	41'7	40'8	40'8	41'0	41'8	42'3	42'8	42'5	42'5	42'5	42'4
14	—	—	—	—	—	—	—	—	—	—	—	—
15	41'8	41'6	41'3	41'2	41'4	42'2	42'4	42'3	42'3	42'4	42'2	42'3
16	38'9	38'2	37'8	36'6	36'7	36'9	37'0	37'2	38'0	38'4	38'2	39'4
17	40'0	40'0	40'6	40'4	40'8	41'1	42'4	43'0	43'6	44'4	44'9	45'0
18	41'6	41'4	41'4	41'4	41'8	42'4	43'1	43'8	44'1	44'5	45'2	45'8
19	45'2	45'6	45'9	45'0	45'0	45'2	45'5	45'6	46'3	46'6	46'8	46'8
20	46'0	46'0	45'6	45'2	45'4	45'3	44'9	44'2	44'0	43'8	43'9	44'4
21	—	—	—	—	—	—	—	—	—	—	—	—
22	37'1	36'9	36'9	37'1	37'1	38'6	38'7	40'0	40'1	40'0	40'0	39'7
23	36'3	35'3	35'8	37'3	37'1	37'4	37'9	—	38'1	—	—	39'4
24	33'3	33'5	34'0	35'1	35'3	36'3	37'7	38'0	38'8	39'8	40'0	40'0
25	39'9	39'3	39'3	39'6	40'5	41'3	42'0	42'4	42'9	43'9	44'4	44'8
26	39'1	38'8	38'8	40'5	40'3	41'3	42'1	42'7	42'6	43'4	42'9	42'7
27	42'7	42'2	42'0	42'1	42'6	43'7	44'2	44'4	44'8	44'4	44'6	44'6
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41'15	40'97	41'14	41'20	41'35	41'87	42'26	42'80	42'85	43'42	43'55	43'41

* Five minutes late.

* Two minutes late.

VERTICAL FORCE.

One Sec. Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
203'4	202'4	203'4	203'5	203'6	203'3	204'0	203'4	203'2	201'5	201'2	198'8	206'23
195'1	195'2	193'8	194'0	194'7	194'7	193'6	192'8	192'0	191'7	190'0	190'5	195'29
198'4	199'6	203'4	203'5	202'4	203'1	203'3	204'1	204'4	206'1	208'3	208'0	198'90
208'3	208'1	208'3	208'4	208'6	209'0	208'8	210'7	210'7	211'2	211'2	211'0	210'59
204'8	204'8	204'8	204'8	204'5	204'5	204'5	205'1	205'2	204'2	204'5	202'1	207'12
211'0	210'4	209'5	209'5	205'0	204'7	—	—	—	—	—	—	—
—	—	—	—	—	—	207'8	207'8	206'9	206'4	205'5	203'1	206'68
200'0	200'0	200'0	199'1	200'0	200'0	199'0	198'1	197'4	196'1	197'3	197'1	199'45
198'7	198'0	199'3	197'6	195'8	195'8	196'1	196'2	196'9	198'1	198'3	197'6	196'59
195'3	195'4	195'5	195'5	196'0	196'4	199'0	199'0	199'0	199'4	199'7	199'8	197'04
204'2	204'5	205'6	203'5	203'9	203'9	204'1	204'0	204'0	204'3	204'1	205'0	203'30
201'3	201'9	202'4	204'7	204'3	203'8	203'8	205'2	205'2	205'0	204'7	203'9	202'92
201'2	201'2	204'7	205'6	204'9	204'4	—	—	—	—	—	—	—
—	—	—	—	—	—	208'4	207'5	205'8	204'9	203'0	203'0	203'57
200'4	200'6	201'4	202'8	203'1	205'2	205'7	204'0	205'4	205'6	198'5	205'2	202'68
208'8	207'2	207'2	208'2	208'4	208'4	205'1	204'0	205'1	207'2	207'1	207'0	208'41
198'3	198'3	198'7	198'9	201'7	203'3	203'3	203'3	204'1	204'3	203'9	204'5	202'41
196'8	198'4	197'3	199'0	199'6	200'0	200'0	198'5	198'5	199'1	198'4	197'4	199'42
194'0	194'0	194'0	192'7	193'9	195'4	195'4	195'4	195'6	194'3	195'8	195'4	196'00
200'0	201'4	200'0	199'0	198'7	201'0	—	—	—	—	—	—	—
—	—	—	—	—	—	212'0	212'7	209'3	198'3	201'1	199'2	200'39
210'2	231'5	238'1	222'6	211'7	205'5	184'2	207'2	206'7	213'0	214'2	214'0	210'00
209'9	210'3	211'1	212'3	212'5	213'2	214'5	215'1	215'2	215'2	213'5	215'4	213'43
215'1	217'3	215'2	209'4	209'7	209'7	203'5	208'9	195'2	196'6	206'8	206'8	209'83
202'1	203'1	207'7	205'6	196'5	197'9	198'4	193'0	201'6	200'8	199'5	204'4	203'37
205'9	202'3	202'1	198'7	198'2	199'9	200'3	201'6	201'0	201'3	202'1	200'6	205'07
201'4	202'3	199'5	199'6	198'7	200'7	—	—	—	—	—	—	—
—	—	—	—	—	—	210'7	212'9	211'4	210'4	211'3	211'1	204'22
203'07	203'68	204'29	203'27	202'35	202'66	202'73	203'77	203'32	203'13	203'33	203'37	203'40

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

42'0	42'2	42'4	42'6	42'8	42'5	42'3	43'0	43'4	43'6	44'0	44'6	41'27
48'2	48'2	48'2	47'9	48'4	48'4	48'7	49'2	49'4	49'6	49'7	50'0	47'70
46'9	46'2	45'6	44'4	43'4	42'4	41'6	41'1	40'6	40'0	39'6	39'0	41'85
39'1	39'3	39'4	39'8	39'6	39'2	39'0	38'7	38'7	38'2	38'0	37'8	38'15
40'2	40'4	40'4	41'0	41'0	40'9	40'9	40'7	40'5	40'2	40'0	39'8	39'19
42'0	42'6	43'5	43'3	42'7	42'1	41'4	40'8	—	—	—	—	—
—	—	—	—	—	—	—	—	40'4	40'4	40'7	41'3	41'05
45'5	45'4	45'4	45'8	46'0	46'0	46'0	46'0	46'0	46'1	46'0	46'5	45'13
47'1	47'2	47'4	47'6	47'1	47'6	47'4	47'0	47'0	46'5	46'0	45'6	47'01
47'2	47'4	47'4	47'2	47'0	47'2	46'8	46'0	45'6	45'2	45'0	44'7	46'05
42'6	42'6	42'8	42'2	42'2	42'6	42'8	42'2	42'3	41'5	41'2	41'6	42'38
45'1	45'3	45'0	44'4	43'8	43'2	43'0	41'9	41'3	41'4	41'3	41'4	42'96
42'5	42'4	42'4	42'2	42'3	41'4	41'5	41'7	—	—	—	—	—
—	—	—	—	—	—	—	—	39'8	39'7	40'8	41'2	41'65
42'2	42'3	43'0	43'0	43'0	42'4	41'7	41'5	41'2	40'6	39'9	39'5	39'1
38'4	38'2	39'4	40'0	39'6	39'7	39'7	39'7	39'8	40'4	40'3	40'1	38'71
44'9	45'0	45'0	45'4	45'4	44'9	44'3	43'6	43'4	43'1	42'2	41'5	42'85
45'2	45'8	45'8	45'6	45'4	44'9	44'7	44'4	44'2	44'6	45'2	45'2	44'03
46'8	46'5	46'8	46'6	46'9	47'4	47'4	47'3	47'1	46'6	46'6	46'8	46'33
43'9	44'4	41'4	44'0	44'2	44'6	44'4	43'2	—	—	—	—	—
—	—	—	—	—	—	—	—	36'3	36'3	36'4	36'8	42'61
0'0	39'7	39'8	40'4	40'7	40'6	40'8	40'8	40'2	39'5	39'0	38'6	39'18
—	39'4	39'2	39'2	39'2	38'7	37'8	37'0	36'8	35'6	35'0	34'3	36'90
0'0	40'0	40'1	39'8	39'8	39'1	39'1	39'1	39'2	39'3	39'1	39'1	38'10
4'4	44'8	45'1	45'0	44'7	44'7	44'1	43'7	43'5	42'6	41'9	41'0	42'34
2'9	42'7	43'4	45'0	44'9	44'6	44'6	45'0	44'8	44'0	44'4	44'2	42'82
4'6	44'6	44'9	44'8	44'7	44'6	44'6	44'5	—	—	—	—	—
—	—	—	—	—	—	—	—	37'8	37'8	37'9	38'0	42'39
43'55	43'44	43'62	43'63	43'53	43'31	43'12	42'81	42'02	41'82	41'70	41'56	41'55
—	—	—	—	—	—	—	—	—	—	—	—	41'38
—	—	—	—	—	—	—	—	—	—	—	—	42'33

* Three minutes late.

VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.												
Mean of observations Gen. Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	1	Sc. Div. 211°3	Sc. Div. 210°0	Sc. Div. 210°3	Sc. Div. 208°5	Sc. Div. 206°0	Sc. Div. 204°9	Sc. Div. 208°3	Sc. Div. 208°2	Sc. Div. 212°1	Sc. Div. 221°0	Sc. Div. 224°1
	2	211°0	210°4	210°3	203°5	203°6	203°9	202°7	201°4	201°0	200°4	199°9
	3	201°5	201°7	201°9	201°3	201°3	199°7	199°1	199°6	199°6	197°9	196°7
	4	199°4	199°6	199°0	195°7	194°9	194°9	195°4	196°1	196°3	196°3	197°2
	5	204°4	205°7	206°4	194°9	198°7	198°6	196°6	196°2	196°9	196°9	196°1
	6	197°1	196°6	198°9	196°8	194°5	193°0	193°0	191°2	192°8	189°7	193°0
	7	—	—	—	—	—	—	—	—	—	—	—
	8	197°3	199°1	199°1	191°2	194°5	195°3	197°0	197°0	198°4	199°7	202°5
	9	195°0	198°5	200°1	201°5	201°9	201°9	208°0	206°8	208°0	206°4	206°7
	10	206°3	206°3	207°4	201°2	202°9	200°7	201°5	205°6	204°0	202°5	202°3
	11	205°2	206°8	208°1	205°0	205°0	205°9	205°0	204°3	202°4	201°8	200°7
	12	210°5	211°0	212°6	210°8	208°2	207°1	207°1	206°6	206°3	205°4	206°4
	13	210°6	210°6	210°6	208°4	207°4	205°3	205°2	202°9	202°9	201°5	202°5
	14	—	—	—	—	—	—	—	—	—	—	—
	15	206°6	208°4	208°2	209°2	205°9	205°2	203°3	203°1	203°8	204°9	204°6
	16	211°2	214°3	213°9	209°5	209°8	208°0	206°9	207°0	207°7	209°0	207°0
	17	213°1	214°1	213°5	207°9	207°6	205°6	205°1	204°9	203°8	202°4	200°5
	18	198°7	201°3	200°0	198°4	196°0	193°5	190°7	188°4	188°3	187°0	187°6
	19	190°4	175°7	171°8	176°9	186°4	203°6	209°0	202°4	206°5	239°6	212°2
	20	195°8	195°9	197°2	197°0	196°2	194°6	193°3	192°0	193°0	193°0	194°4
	21	—	—	—	—	—	—	—	—	—	—	—
	22	208°3	207°9	207°0	206°5	205°7	204°5	204°3	202°8	202°7	202°7	202°7
	23	193°4	195°0	197°2	197°2	195°8	194°6	193°2	191°5	192°5	192°5	192°0
	24	196°1	196°1	194°9	196°0	192°4	191°6	190°6	192°4	193°9	196°1	195°8
	25	189°2	191°7	190°8	188°0	186°7	185°6	187°1	188°0	188°8	190°4	190°6
	26	190°1	194°6	195°3	195°4	194°4	193°3	192°6	193°3	193°3	194°8	193°9
	27	205°2	207°7	208°2	206°0	204°7	205°7	207°6	207°4	207°4	209°3	209°6
	28	—	—	—	—	—	—	—	—	—	—	—
	29	203°4	202°8	200°4	197°6	194°9	194°9	194°1	194°0	194°8	194°8	193°6
	30	196°8	200°6	200°0	198°9	198°2	198°8	198°2	198°8	199°1	199°5	199°1
	31	205°1	204°3	200°5	202°1	201°9	202°6	202°1	198°2	198°3	198°8	198°6
Hourly Means	202°41	203°50	203°53	201°33	200°46	199°72	199°54	199°14	199°58	199°80	199°93	200°27
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
MARCH.	1	37°4	37°4	37°9	39°0	39°3	39°9	39°6	40°0	40°4	40°6	40°6
	2	40°5	40°4	41°0	43°0	42°9	42°8	43°4	44°4	45°0	45°6	46°1
	3	44°7	44°6	44°2	44°4	44°7	45°2	46°0	46°4	46°8	47°4	48°0
	4	45°1	45°0	45°8	47°0	47°1	47°5	47°8	47°9	48°2	48°9	49°3
	5	43°8	43°3	43°4	48°0	44°9	45°8	46°4	47°0	47°4	48°2	48°4
	6	45°4	45°3	45°4	46°3	47°4	48°0	48°4	48°6	48°7	49°6	49°0
	7	—	—	—	—	—	—	—	—	—	—	—
	8	44°5	44°1	45°4	47°2	46°4	46°6	46°7	47°0	47°0	46°7	47°0
	9	42°2	41°6	40°9	40°6	40°6	40°6	40°8	41°0	41°0	41°0	41°1
	10	40°4	40°3	40°6	41°8	42°2	43°3	43°7	44°2	44°4	45°8	44°9
	11	41°4	40°9	40°8	41°2	40°6	40°6	41°4	41°7	42°2	42°3	43°4
	12	37°0	36°6	37°0	38°2	39°3	40°0	40°0	39°9	40°2	41°6	41°5
	13	38°1	38°0	38°7	39°0	39°3	39°8	40°7	41°2	41°8	42°8	43°4
	14	—	—	—	—	—	—	—	—	—	—	—
	15	40°2	39°7	39°6	39°2	39°4	39°8	39°8	42°2	42°0	42°1	42°1
	16	38°0	37°8	37°8	39°5	38°2	38°2	38°5	39°8	40°0	40°4	40°7
	17	37°2	37°5	38°2	40°2	40°0	40°3	41°0	41°7	41°8	42°5	43°4
	18	44°2	43°7	44°2	44°5	45°3	46°4	47°3	47°6	48°6	49°4	50°6
	19	45°4	45°6	46°3	47°0	47°6	48°1	49°1	49°3	49°5	50°0	51°0
	20	48°9	48°4	48°0	48°0	48°4	48°8	49°2	50°0	50°0	50°0	50°0
	21	—	—	—	—	—	—	—	—	—	—	—
	22	41°7	41°6	41°9	42°4	42°6	42°6	43°2	43°3	43°5	43°8	44°2
	23	46°6	46°1	46°4	46°5	46°5	46°9	47°5	48°4	48°7	49°4	50°0
	24	47°4	47°4	48°2	48°8	49°6	49°8	49°8	49°5	49°9	50°5	51°2
	25	50°6	49°8	51°0	52°0	52°2	52°1	52°0	52°2	52°4	52°5	52°5
	26	49°8	49°3	48°6	48°6	49°0	49°3	49°6	50°0	50°1	50°3	50°3
	27	41°3	40°8	41°0	41°4	41°4	41°4	41°2	41°0	40°8	41°4	41°9
	28	—	—	—	—	—	—	—	—	—	—	—
	29	43°0	43°4	44°5	44°9	47°0	47°4	48°2	48°6	48°7	48°7	49°2
	30	44°6	44°2	44°9	45°4	45°7	46°0	46°0	45°7	45°7	45°6	45°0
	31	41°6	42°4	44°4	44°7	45°2	45°6	45°7	46°0	46°4	46°0	46°0
Hourly Means	42°91	42°69	43°07	43°92	44°05	44°41	44°77	45°20	45°45	45°89	46°15	46°19

* Six minutes late.

* Twelve minutes late.

* Five minutes late.

VERTICAL FORCE.

One Scale Division = $\cdot 000065$ parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1 \cdot 64$.

0 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Daily and Monthly Means.
Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.	Sc. Dir.
224° 4'	224° 4'	225° 2'	210° 9'	219° 3'	216° 3'	215° 9'	212° 1'	211° 6'	211° 7'	211° 1'	211° 1'	209° 9'	209° 9'	213° 72'
198° 9'	198° 9'	198° 7'	200° 6'	201° 1'	201° 1'	202° 1'	202° 1'	201° 6'	201° 6'	201° 6'	201° 0'	200° 8'	200° 9'	202° 46'
195° 2'	195° 2'	195° 1'	195° 1'	195° 6'	195° 6'	195° 6'	196° 2'	196° 7'	196° 7'	197° 2'	197° 6'	198° 4'	198° 9'	198° 03'
197° 2'	197° 2'	197° 2'	205° 7'	202° 2'	204° 3'	201° 9'	203° 4'	196° 8'	197° 3'	199° 7'	199° 7'	199° 6'	203° 2'	199° 23'
195° 7'	195° 7'	195° 5'	198° 9'	198° 9'	198° 0'	197° 0'	196° 4'	194° 7'	195° 6'	196° 2'	196° 5'	196° 5'	196° 8'	198° 02'
193° 0'	193° 0'	—	—	195° 7'	191° 8'	191° 3'	—	195° 4'	192° 7'	192° 7'	187° 9'	192° 3'	—	193° 59'
—	—	203° 8'	203° 4'	202° 4'	198° 2'	198° 7'	200° 0'	200° 0'	195° 3'	200° 0'	194° 0'	183° 3'	190° 3'	197° 54'
200° 5'	200° 5'	206° 8'	207° 0'	209° 3'	209° 7'	209° 7'	207° 8'	205° 0'	205° 4'	207° 2'	207° 2'	207° 2'	207° 3'	203° 84'
206° 8'	206° 8'	203° 9'	202° 2'	202° 9'	202° 6'	202° 0'	205° 7'	205° 8'	203° 0'	203° 0'	204° 2'	203° 2'	203° 2'	203° 68'
202° 9'	202° 9'	203° 3'	203° 4'	204° 4'	205° 7'	205° 8'	207° 6'	207° 2'	209° 5'	211° 2'	209° 6'	209° 6'	205° 62'	205° 62'
201° 7'	201° 7'	204° 3'	204° 2'	205° 0'	207° 4'	210° 1'	210° 7'	209° 9'	210° 0'	210° 3'	210° 3'	211° 9'	211° 0'	208° 42'
205° 6'	205° 6'	211° 0'	209° 9'	207° 2'	207° 5'	207° 1'	—	209° 1'	206° 2'	206° 2'	206° 2'	203° 8'	205° 6'	206° 85'
209° 6'	209° 6'	—	—	—	—	—	—	207° 3'	207° 5'	208° 2'	210° 4'	210° 4'	210° 6'	206° 44'
204° 6'	204° 6'	207° 0'	207° 4'	208° 9'	207° 7'	208° 3'	209° 1'	209° 6'	209° 6'	209° 6'	210° 7'	210° 7'	211° 1'	209° 20'
207° 0'	207° 0'	201° 5'	201° 5'	201° 3'	201° 2'	200° 7'	200° 7'	199° 2'	198° 3'	195° 4'	198° 5'	198° 5'	203° 20'	192° 05'
188° 4'	188° 4'	189° 3'	190° 0'	192° 5'	192° 6'	194° 4'	194° 3'	191° 7'	191° 6'	191° 6'	191° 9'	189° 1'	182° 0'	192° 05'
208° 3'	208° 3'	212° 2'	216° 2'	217° 7'	203° 9'	164° 3'	79° 6'	174° 6'	200° 9'	206° 3'	202° 5'	195° 4'	197° 5'	193° 91'
196° 8'	196° 8'	—	—	203° 4'	195° 3'	197° 9'	183° 6'	203° 1'	204° 0'	205° 5'	207° 8'	206° 8'	208° 3'	195° 41'
—	—	202° 7'	202° 5'	202° 5'	201° 0'	201° 3'	200° 7'	200° 7'	200° 6'	195° 1'	193° 5'	191° 9'	189° 0'	201° 65'
203° 0'	203° 0'	194° 1'	197° 6'	197° 5'	198° 2'	195° 9'	195° 2'	193° 2'	182° 3'	180° 3'	193° 0'	195° 4'	195° 7'	191° 62'
195° 7'	195° 7'	194° 7'	191° 1'	191° 2'	192° 0'	191° 4'	190° 7'	175° 8'	174° 0'	187° 2'	189° 4'	188° 9'	188° 5'	191° 10'
191° 7'	191° 7'	190° 6'	189° 5'	188° 4'	188° 6'	189° 1'	189° 1'	190° 3'	186° 6'	186° 6'	186° 5'	188° 5'	188° 5'	188° 79'
194° 5'	194° 5'	191° 7'	191° 7'	194° 8'	198° 2'	198° 2'	198° 2'	198° 6'	202° 6'	201° 8'	203° 0'	199° 2'	204° 9'	196° 43'
205° 4'	205° 4'	206° 0'	206° 0'	205° 3'	196° 1'	196° 1'	—	204° 4'	206° 3'	206° 5'	204° 8'	205° 5'	203° 5'	205° 42'
—	—	193° 9'	194° 8'	194° 8'	195° 1'	196° 6'	197° 0'	197° 0'	197° 0'	196° 5'	196° 6'	191° 9'	191° 4'	195° 89'
193° 6'	193° 4'	200° 8'	201° 1'	202° 0'	202° 3'	203° 5'	202° 8'	202° 6'	202° 6'	202° 5'	203° 8'	203° 8'	205° 1'	200° 97'
199° 1'	199° 1'	198° 6'	199° 2'	199° 8'	202° 1'	200° 8'	200° 6'	202° 8'	202° 5'	204° 0'	204° 3'	204° 3'	205° 5'	201° 55'
—	—	201° 12'	201° 16'	200° 99'	201° 15'	200° 85'	200° 08'	200° 78'	199° 65'	200° 21'	200° 79'	199° 92'	200° 45'	200° 68'
00° 93'	200° 27'	TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
40° 6'	40° 6'	40° 6'	41° 0'	41° 3'	41° 5'	41° 4'	41° 2'	41° 0'	40° 7'	40° 4'	40° 3'	40° 4'	40° 4'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 12'
40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'	40° 6'						

^d Not included in the Means, on account of disturbance.

• Ten minutes 'ate.

VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.												
Mean Guttin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
APRIL.	1	205'7	205'9	204'5	204'0	201'2	198'7	198'3	198'1	199'4	199'4	200'9
	2	—	—	—	—	—	—	—	—	—	—	—
	3	188'9	193'7	192'6	192'6	194'3	193'6	192'0	197'4	205'5*	202'6	225'4
	4	—	—	—	—	—	—	—	—	—	—	—
	5	201'0	198'0	194'7	193'5	192'1	190'4	190'2	185'8	185'8	185'8	192'4
	6	194'4	194'6	193'3	193'3	191'4	190'2	189'2	189'2	189'2	190'1	190'5
	7	187'1	188'2	185'3	184'7	183'3	182'4	184'3	187'2	190'8	187'1	188'9
	7 ^b	183'5	185'5	187'3	184'4	184'4	185'0	186'3	185'7	184'4	181'7	181'8
	9	189'7	188'2	185'9	185'2	184'1	184'1	183'6	185'9	187'6	187'7	186'2
	10	189'7	187'7	184'8	182'8	181'2	181'8	182'9	183'8	185'2	186'6	186'4
	11	—	—	—	—	—	—	—	—	—	—	—
	12	195'2	194'2	192'9	191'6	188'4	186'8	186'8	187'1	188'4	188'4	186'7
	13	192'3	189'7	188'0	187'1	186'5	184'4	184'8	185'6	186'9	189'6	189'0
	14	190'6	189'5	186'9	186'6	185'0	184'8	185'0	187'9	189'9	194'4	194'7
	15	192'5	192'3	191'0	190'6	190'6	192'0	192'0	190'8	191'6	192'9	192'6
	16	199'6	197'6	196'3	194'8	193'7	192'7	193'3	192'0	193'3	195'1	195'7
	17	188'2	184'1	187'5	189'6	188'6	190'6	191'4	191'9	193'3	194'9	195'6
	18	—	—	—	—	—	—	—	—	—	—	—
	19 ^b	206'3	205'3	204'6	202'8	199'5	198'2	197'6	196'9	197'6	195'9	195'9
	20 ^b	148'0	136'0	143'0	174'5	184'5	196'4	197'7	206'9	220'6	222'8	208'6
	21 ^b	177'7	160'9	150'6	174'4	181'7	183'8	185'0	203'8	194'8	191'1	195'7
	22	170'6	170'6	171'0	172'8	173'3	175'3	179'2	178'6	186'9	179'6	178'0
	23	186'6	187'7	189'0	189'3	188'2	188'0	187'5	186'7	186'5	186'0	185'0
	24	193'1	191'5	190'1	187'8	186'6	183'4	182'8	183'2	184'3	184'1	183'8
	25	—	—	—	—	—	—	—	—	—	—	—
	26	186'6	187'7	186'5	186'3	184'6	182'4	180'7	179'5	179'1	178'4	177'7
	27	182'6	181'9	181'7	181'1	181'1	181'1	181'1	183'2	184'2	183'2	184'2
	28	191'2	188'0	185'4	184'5	182'6	182'8	183'1	186'1	188'1	188'6	189'5
	29	188'4	190'4	190'6	189'9	188'7	188'0	188'0	188'7	188'7	190'8	196'8
	30	175'6	174'9	183'5	183'8	187'3	188'1	188'1	190'8	190'8	193'6	197'7
Hourly Means		189'81	189'22	188'74	188'17	187'33	186'87	186'90	187'55	189'07	189'33	190'85
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
APRIL.	1	41'0	41'0	41'2	42'0	43'2	44'0	44'5	45'0	45'2	45'5	45'5
	2	—	—	—	—	—	—	—	—	—	—	—
	3	44'3	44'6	45'4	46'5	47'2	48'3	49'3	49'6	50'0	50'8	51'1
	4	—	—	—	—	—	—	—	—	—	—	—
	5	46'0	46'5	48'1	49'4	50'0	51'0	51'3	51'5	51'6	51'8	51'8
	6	48'6	48'8	49'6	49'5	50'0	50'4	51'0	51'4	51'9	52'2	52'5
	7 ^b	52'2	51'8	52'0	52'0	52'2	52'5	52'8	53'2	53'7	54'4	55'2
	8	56'1	54'4	54'4	54'5	55'0	55'5	56'1	56'5	57'4	58'2	59'0
	9	52'3	53'2	53'6	53'5	54'0	54'0	54'1	53'6	53'8	54'5	54'8
	10	51'9	52'3	53'9	54'2	54'4	54'0	54'5	54'4	54'6	54'4	54'2
	11	—	—	—	—	—	—	—	—	—	—	—
	12	48'0	47'9	48'4	49'0	49'6	50'2	50'2	50'3	51'0	51'4	52'6
	13	49'8	50'4	50'9	52'0	52'0	52'0	52'0	51'5	51'4	51'8	52'2
	14	51'1	51'6	52'5	53'2	53'1	53'1	53'0	53'0	53'2	53'5	54'2
	15	49'5	50'1	50'2	50'1	50'0	49'8	49'6	50'0	50'3	50'4	50'6
	16	46'3	46'6	46'9	47'4	47'6	48'2	48'2	48'7	48'5	47'8	48'2
	17	48'6	48'6	49'0	48'6	48'6	49'0	49'2	49'3	49'2	48'8	48'4
	18	—	—	—	—	—	—	—	—	—	—	—
	19 ^b	41'6	41'6	41'8	42'2	42'6	42'8	43'5	44'2	44'5	44'6	46'0
	20 ^b	50'3	49'5	49'4	49'1	49'4	49'6	50'2	50'7	51'0	51'2	51'0
	21 ^b	52'4	52'4	53'0	53'2	53'2	54'2	54'5	54'5	55'6	57'0	58'2
	22	61'7	61'7	61'0	60'6	60'4	60'3	60'0	60'0	60'0	59'6	59'2
	23	53'5	53'5	52'8	52'4	52'3	53'0	53'6	54'0	54'2	54'5	54'8
	24	50'2	50'8	51'2	51'7	52'2	53'0	53'3	53'6	53'4	54'2	54'7
	25	—	—	—	—	—	—	—	—	—	—	—
	26	52'2	52'2	52'2	52'2	53'1	54'0	54'7	55'7	56'2	57'1	57'5
	27	55'3	55'4	55'3	55'7	55'5	55'2	54'7	54'5	54'5	54'6	54'5
	28	49'2	50'2	50'5	50'9	51'3	52'0	52'2	52'2	52'1	52'2	52'0
	29	49'5	49'5	49'2	49'2	49'2	49'2	49'6	49'8	50'1	51'0	51'2
	30	49'5	49'6	49'7	50'6	51'0	51'1	51'1	51'2	51'6	52'1	52'4
Hourly Means		50'22	50'42	50'76	51'10	51'42	51'78	52'01	52'18	52'39	52'69	52'96

* Four minutes late.

^b Not included in the Means, on account of disturbance.

* Seven minutes late.

VERTICAL FORCE.

One Scale Division = 0.00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
200°0	200°4	200°0	200°0	199°2	199°2	198°4	197°0	198°4	194°5	195°7	189°1	199°46
228°1	202°2	198°1	173°6	183°0	185°9	184°4	184°6	189°5	189°7	199°0	198°9	196°11
192°6	193°2	191°3	191°2	191°2	190°5	191°5	193°6	193°6	193°7	193°7	193°7	192°17
189°3	189°3	188°9	188°0	189°0	189°4	188°4	183°9	188°2	189°0	186°9	187°1	189°69
201°6	207°4	204°1	180°0	—	132°9	148°0	145°5	110°1	124°7	165°0	168°3	175°09
181°7	184°8	184°9	181°1	184°1	184°5	184°2	185°0	180°8	181°0	185°8	186°2	184°35
186°2	186°2	187°2	185°9	187°1	188°3	188°0	187°7	187°6	187°6	189°1	189°5	186°82
186°1	186°0	185°9	186°0	186°0	—	195°0	195°9	196°4	195°9	194°6	194°5	187°83
186°3	186°7	186°7	186°8	188°2	188°5	188°7	188°7	188°7	189°8	190°1	190°2	188°33
188°3	188°3	190°0	190°7	189°3	189°0	189°0	189°7	189°9	190°6	187°7	190°7	188°1
194°8	196°2	197°4	191°8	193°4	190°3	189°9	190°3	190°3	191°4	191°7	191°7	190°18
193°6	194°7	194°7	194°2	193°1	193°7	194°8	195°0	195°0	191°9	191°5	194°3	192°53
192°6	193°0	194°9	194°8	195°3	193°0	195°8	195°3	191°8	184°8	193°6	192°6	191°05
195°6	196°5	196°5	196°2	198°2	198°6	—	205°6	206°1	206°5	206°7	206°3	196°26
195°9	195°0	193°8	192°9	193°2	192°8	194°1	194°0	193°0	145°8	137°0	127°7	186°42
208°6	202°1	196°0	195°0	190°8	189°5	188°5	187°6	185°9	178°3	187°3	186°5	187°56
184°7	195°7	184°2	178°9	166°4	167°5	161°6	159°3	167°0	171°0	170°0	170°3	175°77
178°0	178°8	178°1	177°9	179°1	179°8	177°7	179°3	179°7	182°2	183°5	183°0	178°33
185°0	184°8	185°4	184°7	184°0	185°7	185°7	184°5	185°7	186°8	187°9	188°2	181°5
183°1	183°8	183°7	184°0	183°7	184°6	184°8	184°7	—	—	—	—	186°82
177°7	177°9	177°9	179°5	179°3	178°3	179°0	179°1	179°0	178°0	175°3	177°2	180°37
184°2	184°6	181°6	181°8	185°4	186°3	187°8	188°5	189°5	190°0	191°0	190°4	185°40
192°0	192°6	192°3	193°1	193°5	193°5	193°5	191°7	186°1	184°2	181°0	169°5	179°6
196°8	196°3	196°3	196°3	196°3	196°3	196°3	196°3	196°3	196°3	196°3	196°3	186°92
194°9	192°5	183°9	188°6	179°1	189°5	179°9	185°2	189°0	193°0	193°0	195°3	188°52
190°85	190°56	189°43	187°79	188°28	188°91	189°46	189°16	188°18	188°29	188°76	189°09	188°93

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

45°2	44°7	44°6	44°6	45°0	45°5	44°6	44°8	44°8	44°6	44°5	44°2	44°19
51°8	51°6	51°8	52°0	51°3	51°0	—	—	—	—	—	—	—
51°5	51°0	50°6	50°3	50°1	49°8	49°4	49°4	49°4	49°3	49°3	49°0	50°00
52°4	52°8	52°9	53°1	53°0	52°9	52°6	52°5	52°2	52°3	52°4	52°2	51°65
55°2	56°2	57°1	57°7	58°2	57°8	57°0	56°4	56°0	56°2	56°4	56°0	55°02
58°7	58°0	57°5	57°0	56°6	56°0	55°4	55°2	54°4	54°1	53°6	53°3	56°09
54°6	54°2	53°8	53°6	53°2	52°7	52°5	52°2	52°2	52°2	51°8	51°7	53°38
53°5	53°1	52°3	51°7	51°5	51°3	—	—	—	—	—	—	—
52°0	51°8	52°0	52°4	52°0	51°4	51°4	50°7	50°8	50°4	50°0	50°0	50°66
52°5	52°7	52°9	53°0	52°6	52°6	52°7	52°4	51°8	51°1	51°5	51°3	51°90
54°2	54°2	53°6	53°2	52°8	52°2	52°0	51°7	51°2	50°5	50°3	50°0	52°57
50°5	49°6	49°3	49°2	49°1	48°5	48°2	47°4	47°1	46°9	46°5	46°7	49°20
48°3	48°4	48°4	47°8	47°8	47°3	47°5	47°5	48°4	48°4	48°6	48°6	47°88
47°7	47°8	46°9	46°8	44°9	44°5	—	—	—	—	—	—	—
47°9	48°6	48°6	48°6	48°6	49°0	48°7	48°8	49°0	50°2	50°6	50°4	46°32
51°5	51°5	52°0	52°2	52°4	52°6	53°0	53°0	53°0	52°7	52°7	52°6	51°34
59°3	60°0	62°5	63°6	63°7	62°7	62°7	62°6	61°7	61°7	61°7	61°8	58°32
59°1	59°2	58°6	58°2	57°6	56°8	56°3	56°0	55°5	55°2	55°0	54°2	58°57
54°6	54°8	54°6	54°3	54°0	53°5	53°1	52°5	52°2	51°8	51°7	50°8	53°40
55°0	55°0	55°2	54°7	54°4	54°0	—	—	—	—	—	—	—
58°3	58°0	58°0	58°2	57°9	57°2	57°1	56°9	57°0	56°5	56°1	55°3	55°90
54°3	53°7	53°0	52°3	51°7	51°3	51°0	50°3	49°8	49°4	49°2	49°2	53°13
51°5	51°2	50°4	50°0	49°8	49°7	49°4	49°4	49°3	49°3	49°4	49°5	50°65
50°4	50°5	50°7	51°2	51°2	51°0	50°7	50°5	50°8	50°6	50°0	50°0	50°28
52°1	51°3	51°1	51°0	50°8	50°3	50°2	49°8	49°2	49°0	49°0	48°5	50°60
52°77	52°55	52°30	52°12	51°76	51°40	50°48	50°25	50°10	49°90	49°83	49°64	51°42

utes late.

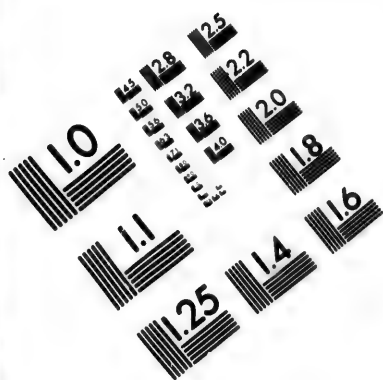
* Five minutes late.

* Eight minutes late.

* Ten minutes late.

R 2





28 25
22



VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MAY.	1	Sc. Div. 194'8	Sc. Div. 191'7	Sc. Div. 191'8	Sc. Div. 188'5	Sc. Div. 187'4	Sc. Div. 188'8	Sc. Div. 190'1	Sc. Div. 190'6	Sc. Div. 190'5	Sc. Div. 191'9	Sc. Div. 191'9
	2	—	—	—	—	—	—	—	—	—	—	—
	3	194'7	191'1	188'2	186'3	185'4	184'4	185'0	186'4	187'2	188'2	188'8
	4	189'6	187'4	185'0	182'5	180'9	180'3	180'5	181'2	181'1	181'5	180'9
	5	185'9	184'9	182'8	180'2	176'2	174'9	176'2	175'0	175'0	176'3	175'7
	6	183'7	183'7	181'5	179'4	176'6	174'8	171'7	171'0	171'4	171'4	172'5
	7 ^a	176'5	176'5	174'1	170'3	167'2	166'8	165'7	164'6	166'2	167'3	168'5
	8 ^a	121'5	143'6	160'9	164'2	164'2	170'7	175'5	177'5	175'5	176'4	175'4
	9	—	—	—	—	—	—	—	—	—	—	—
	10	178'4	175'8	175'8	173'4	168'9	169'9	170'5	172'1	166'5	166'5	170'3
	11	171'0	171'7	172'2	171'3	167'5	164'8	163'9	164'8	164'5	165'5	166'5
	12	168'3	167'5	165'7	162'6	162'6	162'1	161'9	161'1	161'0 ^b	162'1	163'4
	13	167'1	166'3	163'5	162'1	162'1	162'6	163'9	165'3	166'5	167'9	164'9
	14	169'2	169'2	168'0	166'1	164'8	164'8	163'9	165'4	168'2	166'3	165'6
	15	167'9	161'1	163'8	160'9	160'1	162'3	164'7	165'9	169'5	168'2	166'0
	16	—	—	—	—	—	—	—	—	—	—	—
	17	174'7	173'1	170'8	169'3	169'2	169'4	170'5	173'5	173'0	173'0	173'0
	18	174'4	171'8	169'9	169'3	167'0	168'3	166'4	166'4	166'4	164'9	165'3
	19	169'4	166'5	167'1	167'1	163'3	161'7	161'7	161'0	162'0	161'7	164'4
	20	169'6	169'5	169'1	166'5	165'3	163'8	164'4	168'8	169'8 ^d	171'6	171'3
	21	170'1	172'4	171'8	173'1	171'1	171'1	171'1	170'3	172'3	173'4	172'9
	22	172'6	172'0	171'2	171'8	171'3	167'3	165'8	165'4	165'4	166'2	166'2
	23	—	—	—	—	—	—	—	—	—	—	—
	24	169'6	168'9	168'9	167'9	167'9	168'6	167'1	167'1	167'1	167'3	167'3
	25	171'6	171'0	167'9	167'5	167'4	164'9	162'7	162'7	162'8	163'3	163'3
	26	175'9	173'6	172'4	171'0	170'4	170'4	172'5	172'1	171'4	174'2	176'4
	27	178'8	176'8	174'6	172'9	172'2	170'2	169'9	170'5	172'3	172'3	173'9
	28 ^a	171'9	170'7	171'9	171'9	169'6	171'4	171'3	171'8	169'8	168'8	168'4
	29	162'6	165'7	164'4	161'0	163'5	164'4	161'9	162'3	163'5	162'1	164'2
	30	—	—	—	—	—	—	—	—	—	—	—
	31	173'0	173'3	174'4	173'7	173'2	172'6	173'4	173'4	178'5	178'5	181'8
Hourly Means		175'34	174'13	173'08	171'50	170'19	169'67	169'55	170'10	170'69	170'97	171'29
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
MAY.	1	49'5	49'4	49'7	50'6	50'9	51'2	51'3	51'3	51'8	52'3	52'3
	2	—	—	—	—	—	—	—	—	—	—	—
	3	47'6	48'3	50'0	50'4	50'7	51'1	51'2	51'4	51'7	52'5	52'8
	4	50'9	52'1	53'1	53'5	53'9	54'6	54'9	55'0	55'2	55'4	55'9
	5	52'8	53'3	54'0	54'8	55'8	56'4	56'8	57'2	57'6	58'3	58'8
	6	54'4	55'4	55'7	56'3	57'3	58'0	58'5	59'1	59'4	60'0	60'7
	7 ^a	57'2	58'0	59'0	60'0	60'4	61'3	61'1	61'4	61'5	61'8	62'0
	8 ^a	60'3	59'5	59'5	59'7	60'5	60'7	60'7	60'7	60'5	61'2	61'8
	9	—	—	—	—	—	—	—	—	—	—	—
	10	58'4	58'7	59'0	59'0	59'3	60'6	61'0	61'3	61'5	62'0	62'3
	11	61'3	60'7	60'7	61'0	61'5	62'2	62'7	63'4	63'5	64'0	64'3
	12	62'5	62'5	62'8	64'1	64'6	65'4	65'8	66'1	66'4	66'3	66'0
	13	63'2	63'4	64'2	64'6	64'8	65'0	65'0	65'0	65'2	65'5	65'5
	14	62'5	62'0	62'2	62'7	63'5	64'0	64'0	63'7	63'7	63'7	63'9
	15	59'7	60'2	60'7	61'3	62'3	62'7	63'1	63'6	64'1	64'7	65'3
	16	—	—	—	—	—	—	—	—	—	—	—
	17	60'2	60'4	60'5	61'1	61'7	62'5	62'5	63'3	63'6	63'9	64'5
	18	60'2	60'5	60'9	61'4	61'8	62'6	63'0	63'6	64'3	64'6	64'9
	19	61'5	61'6	61'9	63'0	63'0	63'4	63'6	64'2	64'5	65'0	65'5
	20	61'0	61'2	61'6	62'0	62'5	62'7	63'0	63'3	63'4	63'6	63'8
	21	59'6	59'2	59'0	59'2	59'0	59'0	59'7	60'5	60'9	61'3	61'5
	22	59'7	60'2	60'7	60'9	61'3	61'8	62'3	62'7	63'4	63'6	63'8
	23	—	—	—	—	—	—	—	—	—	—	—
	24	61'3	61'1	61'1	61'0	61'0	61'3	61'4	61'6	61'3	62'0	62'4
	25	60'4	60'4	60'9	61'4	62'1	62'7	62'9	63'5	64'3	64'6	64'6
	26	58'3	58'7	58'7	59'0	59'1	59'2	59'2	58'3	58'5	59'2	59'3
	27	56'2	56'7	57'8	58'2	59'0	59'0	59'2	59'7	59'9	60'3	60'7
	28 ^a	58'4	58'6	58'5	58'8	59'2	59'7	60'3	61'3	61'6	63'3	63'7
	29	64'5	64'2	63'4	63'8	64'5	64'7	64'8	64'7	64'8	65'1	65'3
	30	—	—	—	—	—	—	—	—	—	—	—
	31	59'0	58'5	58'2	58'1	57'8	57'5	57'3	57'1	56'5	56'4	56'5
Hourly Means		58'42	58'64	58'99	59'45	59'89	60'33	60'67	60'85	61'11	61'49	61'75

^a Omitted in the Means, on account of disturbance.^b Seven minutes late.^c Nine minutes late.

Temperature, 1° 54.

	10h.	11h.
1	191° 9	191° 9
2	188° 8	188° 7
3	180° 9	181° 4
4	175° 7	175° 6
5	172° 5	171° 8
6	168° 5	168° 9
7	175° 4	174° 2
8	170° 2	170° 2
9	166° 8	166° 5
0	163° 4	163° 3
1	164° 9	164° 0
2	165° 6	166° 9
3	166° 0	162° 8
4	173° 0	172° 7
5	164° 0	164° 0
6	161° 7	164° 4
7	171° 3	173° 8
8	172° 0	172° 9
9	166° 2	166° 2
0	167° 3	168° 1
1	163° 3	166° 7
2	176° 4	176° 5
3	173° 9	180° 1
4	168° 4	169° 5
5	164° 2	164° 1
6	181° 8	181° 6
7	171° 29	171° 98

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 54.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 193° 1	Sc. Div. 193° 0	Sc. Div. 191° 3	Sc. Div. 189° 0	Sc. Div. 189° 1	Sc. Div. 188° 9	Sc. Div. 194° 3	Sc. Div. 194° 7	Sc. Div. 194° 7	Sc. Div. 193° 4	Sc. Div. 193° 4	Sc. Div. 193° 2	Sc. Div. 191° 58
189° 0	189° 4	187° 2	187° 0	186° 5	185° 9	186° 8	187° 0	187° 0	187° 3	189° 6	189° 6	187° 78
181° 4	181° 4	182° 0	182° 5	182° 5	182° 5	183° 2	184° 0	182° 8	183° 8	185° 4	186° 0	182° 91
175° 6	175° 9	176° 7	177° 9	177° 9	178° 1	178° 1	177° 8	178° 6	178° 5	178° 6	183° 7	178° 17
171° 8	171° 8	173° 5	173° 8	172° 6	173° 7	173° 7	171° 9	170° 1	168° 0	172° 6	176° 5	174° 15
170° 0	174° 4	183° 8	175° 6	171° 9	176° 9	123° 5	—	46° 2	46° 1	118° 6	110° 6	153° 49
174° 2	174° 2	174° 3	173° 7	175° 0	175° 3	—	—	—	—	—	—	—
170° 2	170° 2	169° 0	170° 2	170° 2	170° 3	170° 3	174° 3	167° 8	167° 1	171° 6	176° 4	169° 08
166° 8	166° 8	166° 8	167° 2	167° 2	167° 8	167° 8	167° 4	167° 8	169° 0	162° 5	168° 4	170° 84
163° 3	164° 6	163° 8	163° 6	162° 2	164° 0	164° 1	164° 5	165° 8	165° 2	166° 5	166° 5	167° 24
163° 0	162° 4	167° 5	163° 7	163° 7	163° 7	165° 1	165° 1	168° 1	168° 4	168° 9	168° 6	164° 01
164° 9	165° 2	165° 1	165° 7	165° 7	165° 7	165° 7	168° 8	169° 3	169° 3	161° 5	158° 5	165° 10
162° 8	170° 4	168° 6	169° 7	170° 0	170° 9	—	—	—	—	—	—	165° 99
175° 0	175° 0	170° 0	176° 0	170° 4	173° 6	168° 8	171° 1	171° 1	172° 2	173° 1	174° 4	167° 35
166° 5	165° 3	164° 9	166° 3	151° 7	158° 7	163° 1	166° 9	158° 5	159° 5	165° 3	176° 1	171° 57
166° 9	165° 8	165° 5	162° 3	163° 9	165° 5	168° 0	166° 3	163° 3	164° 4	165° 0	164° 7	165° 30
168° 7	168° 3	167° 2	165° 1	166° 8	165° 4	161° 0	162° 5	167° 6	168° 4	169° 3	168° 6	164° 55
172° 2	172° 6	171° 5	173° 1	173° 1	172° 2	169° 5	171° 2	171° 2	170° 9	172° 2	173° 2	167° 60
166° 5	166° 3	163° 7	166° 7	166° 3	166° 4	—	—	—	—	—	—	171° 85
167° 1	167° 1	167° 1	166° 6	166° 8	168° 3	168° 9	166° 6	166° 9	168° 5	168° 1	168° 7	167° 54
166° 7	169° 0	168° 7	168° 7	168° 7	168° 4	169° 4	168° 2	168° 7	171° 6	171° 6	172° 9	168° 35
175° 3	174° 0	173° 9	174° 6	175° 0	175° 7	170° 8	172° 0	172° 4	173° 4	173° 4	174° 9	168° 12
178° 1	174° 8	174° 8	174° 9	174° 8	161° 0	164° 2	173° 4	174° 9	171° 4	170° 0	180° 7	174° 49
170° 4	164° 6	162° 3	161° 8	150° 2	161° 1	159° 7	141° 2	98° 8	130° 0	132° 0	151° 8	172° 68
164° 1	164° 1	164° 5	164° 9	164° 7	164° 7	—	—	—	—	—	—	159° 62
181° 5	179° 1	178° 8	181° 0	179° 5	178° 5	177° 7	171° 4	171° 7	172° 6	172° 6	174° 4	165° 97
171° 76	171° 85	171° 40	171° 76	170° 84	170° 86	171° 45	172° 33	172° 12	172° 33	173° 01	174° 10	177° 37

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 52° 3	Sc. Div. 52° 0	Sc. Div. 51° 8	Sc. Div. 51° 6	Sc. Div. 51° 4	Sc. Div. 51° 2	Sc. Div. 47° 2	Sc. Div. 47° 4	Sc. Div. 47° 4	Sc. Div. 47° 5	Sc. Div. 47° 6	Sc. Div. 47° 7	Sc. Div. 50° 28
53° 0	53° 0	53° 1	53° 2	53° 1	52° 5	52° 3	52° 2	51° 6	51° 2	50° 8	50° 2	51° 53
55° 9	55° 6	55° 4	55° 2	54° 8	54° 4	54° 0	53° 8	53° 5	53° 7	53° 1	52° 8	54° 26
58° 6	58° 4	58° 0	57° 8	57° 3	57° 0	56° 8	56° 8	56° 8	56° 3	56° 2	54° 6	56° 63
60° 6	60° 4	60° 0	60° 2	60° 0	60° 0	59° 8	59° 8	59° 0	58° 2	57° 8	57° 2	58° 67
62° 6	62° 0	62° 2	61° 1	60° 9	61° 3	61° 3	—	61° 7	61° 6	61° 0	61° 3	61° 01
61° 7	61° 5	61° 3	60° 8	60° 5	60° 4	—	—	—	—	—	—	—
62° 5	62° 3	62° 1	62° 7	62° 7	61° 9	59° 4	59° 1	59° 0	59° 0	59° 0	59° 0	60° 28
63° 8	63° 8	63° 6	63° 5	63° 5	63° 8	61° 7	61° 6	61° 6	61° 5	61° 5	61° 2	61° 20
65° 5	65° 5	65° 3	65° 1	65° 6	65° 4	63° 0	63° 2	63° 4	63° 8	63° 9	62° 5	62° 95
65° 3	65° 4	65° 4	65° 5	65° 1	64° 3	64° 8	64° 3	64° 3	64° 3	64° 1	63° 4	64° 85
64° 3	64° 3	63° 7	63° 5	63° 3	62° 9	63° 5	63° 1	62° 5	61° 9	61° 5	61° 1	64° 23
65° 9	65° 7	65° 5	65° 1	64° 7	64° 2	62° 5	61° 8	61° 4	60° 6	60° 5	60° 0	62° 87
64° 4	64° 0	63° 7	63° 6	63° 4	63° 0	62° 4	61° 7	61° 3	60° 7	60° 5	60° 3	62° 97
65° 4	65° 9	65° 4	65° 2	65° 0	65° 2	62° 5	62° 3	62° 0	61° 5	61° 0	60° 5	62° 52
65° 6	65° 5	65° 5	65° 3	64° 5	64° 1	64° 8	63° 7	62° 9	62° 5	62° 3	61° 8	63° 47
63° 7	63° 5	63° 3	63° 1	62° 7	62° 5	63° 7	63° 5	62° 7	62° 4	61° 8	61° 5	63° 70
61° 5	61° 6	61° 5	61° 4	61° 3	60° 7	62° 2	62° 0	61° 3	60° 8	60° 6	60° 0	62° 40
63° 8	63° 8	63° 6	63° 7	63° 5	63° 5	60° 6	60° 6	60° 4	60° 4	60° 0	60° 0	60° 45
62° 5	62° 6	62° 7	62° 5	62° 5	62° 2	62° 3	62° 3	62° 0	62° 2	62° 0	61° 5	62° 44
64° 6	64° 4	64° 7	64° 0	63° 5	63° 1	62° 0	61° 7	61° 5	61° 1	60° 7	60° 3	61° 68
59° 3	59° 3	59° 2	59° 0	58° 6	58° 2	62° 2	61° 5	60° 4	59° 5	59° 2	58° 4	62° 41
61° 1	61° 1	60° 8	61° 0	60° 7	60° 0	57° 7	57° 2	56° 6	56° 3	55° 7	55° 7	58° 41
64° 5	64° 5	66° 5	66° 5	66° 7	66° 7	60° 0	59° 5	59° 0	59° 0	58° 4	58° 4	59° 47
65° 0	64° 9	64° 5	64° 0	63° 8	64° 2	66° 7	66° 7	66° 3	65° 7	65° 5	64° 9	63° 29
56° 5	56° 5	56° 0	55° 2	55° 0	54° 7	60° 3	60° 0	59° 8	59° 6	59° 2	58° 5	63° 29
61° 79	61° 72	61° 50	61° 37	61° 13	60° 80	60° 05	59° 82	59° 45	59° 10	58° 91	58° 39	60° 31

* Five minutes late.

* Four minutes late.

Five minutes late.

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
Mean Götting- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JUNE.	1	Sc. Div. 178'4	Sc. Div. 177'4	Sc. Div. 175'6	Sc. Div. 174'0	Sc. Div. 171'6	Sc. Div. 171'6	Sc. Div. 174'8	Sc. Div. 172'5	Sc. Div. 172'8	Sc. Div. 175'2	Sc. Div. 177'7	Sc. Div. 178'4
	2	164'8	167'2	169'2	169'5	168'6	166'0	164'4	165'0	166'4	168'3	166'2	165'8
	3	165'3	166'9	167'0	165'9	164'8	166'0	164'4	163'3	163'1	164'3	165'7	167'9
	4	168'8	167'7	166'6	166'6	166'3	165'0	165'0	165'0	166'1	166'2	166'2	166'3
	5	173'0	172'4	171'8	171'8	172'4	171'1	168'9	168'6	170'3	169'4	167'7	166'6
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	168'7	166'4	164'8	163'1	161'0	159'6	164'2	160'5	161'8	160'3	161'1	160'1
	8	169'8	168'1	167'0	167'9	167'2	168'3	167'8	167'1	166'3	166'8	167'0	167'0
	9	166'6	166'1	165'8	164'0	163'4	163'1	162'8	162'8	161'9	165'4	158'4	155'0
	10	157'6	154'9	157'3	157'3	154'9	155'7	157'8	162'6	162'6	162'2	161'1	163'8
	11	163'3	161'6	160'9	157'1	154'8	157'0	160'4	160'4	163'1	163'5	169'0	166'7
	12	168'6	168'6	166'8	165'2	166'4	166'5	164'7	166'7	167'8	166'1	168'0	170'8
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	170'3	166'8	169'6	170'4	173'0	172'4	180'7	184'4	189'1	189'7	192'3	185'4
	15	182'8	182'9	183'1	182'0	179'6	179'8	179'8	178'7	175'0	176'4	174'7	173'2
	16	172'1	172'2	171'0	170'8	169'6	167'6	166'3	165'4	165'2	166'1	169'7	169'6
	17	169'1	169'5	167'1	163'3	162'8	164'2	165'0	167'0	165'7	166'0	165'4	164'1
	18	170'0	169'3	167'8	165'5	163'0	160'9	159'9	161'0	163'1	163'1	165'2	165'0
	19	166'2	165'4	165'2	165'0	164'8	162'5	161'0	160'7	162'2	163'9	163'3	162'3
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	163'1	162'5	161'4	163'9	157'8	155'8	155'8	155'8	157'0	157'8	158'4	159'5
	22	163'0	162'5	162'5	161'8	161'8	159'5	158'2	156'3	157'5	159'1	159'4	159'8
	23	161'8	161'3	159'4	158'1	157'4	154'8	154'8	154'8	155'5	155'8	155'3	154'3
	24	158'9	158'3	156'3	155'6	154'9	152'3	151'8	150'3	149'6	150'5	150'2	149'6
	25	156'4	155'2	155'8	155'6	151'8	150'4	150'0	150'0	150'4	150'4	149'5	147'8
	26	151'8	151'6	148'6	148'6	147'5	145'8	145'1	144'8	144'2	145'6	146'0	145'5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	149'9	149'9	151'2	148'3	147'4	147'4	147'4	148'1	146'7	145'8	147'0	148'9
	29	152'8	152'8	152'5	152'8	153'0	151'8	150'6	148'9	146'0	146'8	149'0	149'5
	30	154'4	154'4	152'2	150'4	149'5	147'5	147'1	148'8	148'8	149'7	152'1	151'8
Hourly Means		164'90	164'30	163'67	162'87	161'74	160'87	161'10	161'13	161'47	162'09	162'52	162'10
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
JUNE.	1	55'3	55'3	55'3	56'0	56'5	56'5	57'4	59'0	59'6	59'8	60'2	60'0
	2	59'2	59'2	59'2	59'5	60'1	61'0	61'4	61'6	61'5	61'8	62'3	63'0
	3	60'0	61'0	61'4	61'3	61'3	61'6	62'1	62'5	62'8	63'5	63'6	63'6
	4	61'3	61'0	61'6	61'6	62'3	63'0	62'6	62'7	62'6	63'1	63'1	63'1
	5	58'4	58'4	58'2	58'6	59'1	59'2	59'4	60'2	60'2	60'8	61'4	61'4
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	60'0	60'0	60'4	61'0	61'7	62'5	63'0	63'5	63'7	64'7	65'5	65'9
	8	62'3	62'3	62'2	62'1	62'1	62'3	62'5	62'6	62'7	63'3	63'5	63'5
	9	61'5	61'5	61'6	62'3	62'5	63'7	64'3	64'7	65'6	66'6	67'5	68'5
	10	66'6	66'6	66'6	66'6	66'6	66'6	66'7	66'5	66'6	66'7	66'7	66'7
	11	64'3	64'5	64'8	65'0	65'5	66'0	66'0	65'9	65'9	65'7	65'7	65'5
	12	60'5	60'5	61'0	61'1	61'1	61'7	61'7	62'0	62'3	62'6	63'3	63'6
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	59'0	59'3	59'2	59'0	58'8	58'8	58'0	57'6	57'2	57'1	57'0	56'9
	15	53'3	53'3	53'8	53'8	53'8	54'2	54'5	54'7	55'5	56'7	57'7	58'6
	16	59'0	58'7	59'1	59'5	60'0	60'4	60'6	60'5	60'6	61'0	61'4	61'2
	17	59'2	59'2	59'3	60'0	60'4	60'5	60'6	61'0	61'3	61'9	62'5	63'3
	18	59'0	59'3	60'0	60'2	61'5	62'1	63'4	63'3	63'5	64'0	64'2	64'2
	19	61'8	62'0	61'7	61'7	61'8	62'4	62'5	62'8	63'2	63'3	63'5	63'7
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	62'4	62'5	62'7	63'4	64'2	64'5	64'6	64'9	65'2	65'3	65'5	65'5
	22	62'6	62'5	62'1	62'7	63'2	63'5	63'7	64'4	64'7	65'5	65'5	65'7
	23	63'0	63'5	63'9	64'8	65'7	66'3	66'5	66'5	66'8	67'3	68'3	68'5
	24	65'5	65'7	66'3	66'6	67'5	68'2	68'5	68'7	69'3	70'0	70'3	70'4
	25	65'8	66'4	66'6	66'9	67'4	68'0	68'5	69'3	69'7	70'6	71'2	71'5
	26	68'5	68'2	69'7	70'4	71'0	71'5	72'0	72'4	72'5	73'0	73'5	73'7
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	70'5	70'1	69'7	69'7	70'3	70'4	70'5	70'5	71'2	71'6	72'0	72'3
	29	67'6	67'4	67'5	67'8	68'3	68'7	69'3	69'8	70'1	70'7	70'7	70'9
	30	67'0	67'0	67'5	68'0	68'9	69'5	69'7	70'2	70'5	70'7	71'3	71'1
Hourly Means		62'06	62'13	62'36	62'68	63'14	63'58	63'85	64'16	64'43	64'90	65'28	65'47

* Nine minutes late.

b Three minutes late.

e of Temperature, 1°.64.

9h.	10h.	11h.
Sc. Div.	Sc. Div.	Sc. Div.
175°2	177°7	178°4
168°3	166°2	165°8
164°3	165°7	167°9
166°2	166°2	166°3
169°4	167°7	166°6
160°3	161°1	160°1
166°8	167°0	167°0
165°4	158°4	155°0
162°2	161°1	163°8
163°5	169°0	166°7
166°1	168°0	170°8
189°7	192°3	185°4
176°4	174°7	173°2
166°1	169°7	169°6
166°0	165°4	164°1
163°1	165°2	165°0
163°9	163°3	162°3
157°8	158°4	159°5
159°1	159°4	159°8
155°8	155°3	154°3
150°5	150°2	149°6
150°4	149°5	147°8
145°6	146°0	145°5
145°8	147°0	148°9
146°8	149°0	149°5
149°7	152°1	151°8
162°09	162°52	162°10

59°8	60°2	60°0
61°8	62°3	63°0
63°5	63°6	63°6
63°1	63°1	61°1
60°8	61°4	61°4
64°7	65°5	65°9
63°3	63°5	63°5
66°6	67°5	68°5
66°7	66°7	66°7
63°7	65°7	65°5
62°6	63°3	63°6
57°1	57°0	56°9
56°7	57°7	58°6
61°0	61°4	61°2
61°9	62°5	63°3
64°0	64°2	64°2
63°3	63°5	63°7
65°3	65°5	65°5
65°5	65°5	65°7
67°3	68°3	68°5
70°0	70°3	70°4
70°6	71°2	71°5
73°0	73°5	73°7
71°6	72°0	72°3
70°7	70°7	70°9
70°7	71°3	71°1
64°90	65°28	65°47

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
182°6	175°8	174°6	171°7	169°6	170°4	170°4	170°2	170°2	170°4	167°7	173°50	173°50
165°8	165°1	165°8	165°6	165°6	166°2	166°2	165°6	164°3	160°3	161°7	163°4	165°71
167°9	167°3	165°7	165°0	167°3	167°3	166°6	162°0	164°1	164°5	167°8	168°9	165°79
166°3	166°3	166°3	167°8	167°8	168°6	167°5	168°9	170°4	171°8	173°1	173°1	167°65
166°2	166°4	166°6	166°0	166°9	167°7	164°7	164°1	168°1	169°0	168°7	170°7	168°71
159°8	160°5	161°4	169°1	169°2	161°2	161°2	158°8	154°4	159°0	166°2	169°1	162°56
166°7	167°0	164°1	164°5	166°0	166°0	166°6	166°7	165°3	164°8	162°5	165°0	166°48
156°7	154°9	154°9	155°5	155°9	153°3	153°3	155°5	155°5	155°3	157°6	157°6	159°33
167°1	166°0	168°9	163°1	161°8	158°7	159°5	156°9	154°8	155°8	157°5	161°5	159°97
166°7	167°3	171°7	167°9	166°7	166°4	166°4	166°9	167°1	167°7	164°5	168°6	164°40
173°1	173°3	181°9	170°0	180°9	167°7	149°3	148°3	157°2	169°0	172°1	172°3	167°55
182°6	182°6	178°5	180°2	179°0	177°7	171°8	177°5	177°9	177°5	174°6	180°4	178°47
172°3	172°3	169°2	170°0	169°3	170°8	171°8	172°8	172°8	172°8	174°7	176°3	175°55
169°6	168°6	168°9	168°6	168°0	165°9	167°7	169°4	166°6	166°2	170°5	170°5	168°59
164°5	164°5	162°8	163°6	163°6	159°4	163°8	164°9	165°0	165°0	169°3	169°2	165°20
165°8	164°4	164°6	162°0	162°1	161°2	161°2	162°8	162°8	164°2	165°4	165°6	164°00
162°5	161°3	161°3	161°3	163°6	163°6	164°5	164°7	164°3	164°3	166°6	167°1	163°60
159°9	159°9	158°0	156°2	159°2	159°7	158°5	159°4	161°3	160°7	162°9	162°9	159°47
160°2	160°2	158°2	158°5	158°5	158°5	158°5	158°7	158°7	159°0	161°7	163°1	159°80
153°1	153°1	153°1	148°6	148°6	151°0	152°2	153°2	154°4	155°1	155°5	157°1	154°93
149°6	148°9	148°9	148°9	149°9	151°1	151°9	151°6	152°4	154°5	155°7	156°4	152°42
147°8	148°1	149°0	149°5	149°6	150°6	151°3	152°6	152°6	152°6	152°2	152°0	151°21
145°7	145°1	144°6	144°6	144°2	144°2	144°5	144°5	145°5	146°6	146°6	146°6	146°16
148°8	148°4	148°9	149°7	147°8	148°6	145°3	146°0	146°2	146°2	153°3	153°2	148°35
149°5	148°6	148°6	149°2	149°2	149°7	149°5	147°9	151°3	143°1	147°6	155°1	149°82
151°8	152°5	152°5	151°5	147°3	145°3	147°5	148°0	152°7	154°7	156°9	158°7	151°09
162°41	161°86	161°88	161°10	161°45	160°51	159°65	159°87	160°61	161°16	162°91	164°31	161°94

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

60°1	60°2	60°2	60°3	60°3	60°0	60°0	60°0	60°0	59°6	59°4	59°2	58°76
63°5	63°5	63°2	62°8	62°7	62°2	62°3	61°6	61°5	61°3	60°7	60°2	61°48
63°4	63°0	62°8	63°0	62°6	62°5	62°4	62°0	62°0	62°0	61°7	61°3	62°22
62°7	62°5	62°1	61°7	61°2	61°0	61°0	60°0	59°6	59°3	58°8	58°5	61°52
61°8	61°8	61°8	61°6	61°4	61°0	60°4	60°7	60°6	60°4	60°3	60°0	60°30
65°7	65°5	65°4	64°8	64°4	63°9	63°7	63°5	63°5	63°2	63°0	62°6	63°38
63°5	63°1	63°1	63°0	62°8	62°5	62°4	62°4	62°8	62°4	62°0	61°5	62°62
68°5	68°5	68°7	68°5	68°5	68°3	68°0	67°9	67°7	67°5	67°4	67°2	66°13
67°2	67°0	66°6	66°2	66°0	65°5	65°5	65°0	64°9	64°7	64°6	64°5	66°13
65°3	64°3	63°7	63°4	62°7	62°3	61°7	61°0	60°6	60°4	60°1	60°0	63°76
63°9	64°2	64°0	63°6	63°3	63°0	62°5	59°5	59°5	59°0	59°2	59°0	61°61
57°2	57°0	56°5	56°7	56°2	56°1	56°0	55°4	55°6	55°6	55°4	54°2	57°07
59°1	59°2	60°0	60°2	59°7	59°0	59°0	58°5	58°4	58°0	57°8	57°4	56°92
61°4	61°2	61°0	60°6	60°4	60°4	60°0	59°8	59°2	58°5	58°2	57°4	60°00
63°5	63°5	63°5	63°3	62°7	62°5	61°8	61°4	60°7	60°2	59°8	59°0	61°30
64°0	63°7	63°5	63°5	63°2	63°0	63°0	63°0	62°6	62°6	62°5	62°4	62°59
63°9	64°1	64°0	64°4	63°5	63°2	61°7	61°7	61°6	61°3	61°2	60°8	62°58
65°5	65°5	65°5	65°7	65°5	65°3	65°3	64°5	64°1	63°6	63°4	62°8	64°47
65°8	65°6	66°0	65°6	65°3	65°2	64°7	64°3	64°0	63°8	63°6	63°5	64°32
68°7	68°6	68°6	70°0	70°0	69°4	68°5	68°0	67°3	67°0	66°7	66°1	67°08
70°4	70°6	70°5	70°5	69°7	69°3	68°5	68°1	67°8	67°3	66°7	66°3	68°45
71°5	71°4	70°7	70°3	69°8	69°6	69°3	68°7	68°6	68°5	68°5	68°3	69°05
73°6	73°3	73°2	73°1	72°7	72°6	72°7	72°7	72°5	72°0	71°6	71°0	71°97
72°3	72°5	71°7	71°4	70°8	70°5	70°1	69°6	69°1	68°7	68°4	68°4	70°51
70°9	71°0	70°6	70°1	69°9	69°6	69°0	68°3	67°5	67°0	67°0	66°7	69°02
71°4	71°3	71°0	70°5	70°0	69°5	69°0	68°4	67°7	67°2	66°7	66°0	69°17
65°57	65°47	65°30	65°18	64°83	64°52	64°06	63°69	63°43	63°12	62°87	62°47	63°94

* Seven minutes late.

* Five minutes late.

VERTICAL FORCE.												
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JULY.	1	157.5	157.5	154.5	151.9	150.5	150.4	149.5	146.3	147.5	146.8	147.7
	2	152.8	152.3	151.5	149.0	146.3	144.2	142.9	140.9	138.9	138.9	141.8
	3	149.8	149.2	148.6	148.0	142.5	138.8	138.3	138.3	138.7	138.7	139.5
	4	—	—	—	—	—	—	—	—	—	—	—
	5	145.4	146.1	144.0	144.0	140.6	139.6	137.0	138.5	138.1	137.0	136.2
	6	142.5	143.5	144.5	143.9	143.9	143.2	142.2	141.6	141.9	141.9	142.3
	7	134.4	138.3	138.3	138.7	139.8	139.6	137.1	137.1	140.0	140.0	138.3
	8	139.7	138.6	137.6	137.6	135.0	133.0	133.3	131.6	133.7	134.5	135.3
	9	139.9	139.1	138.6	135.2	132.1	130.7	132.6	136.2	138.5	144.7	161.0
	10	143.0	143.0	139.9	139.9	139.2	137.0	139.1	138.9	143.6	143.6	141.1
	11	—	—	—	—	—	—	—	—	—	—	—
	12	139.3	138.5	140.1	136.7	135.8	134.5	136.9	136.9	139.9	138.9	137.7
	13	138.4	138.4	139.2	138.4	133.8	132.9	132.0	131.3	130.6	131.4	135.7
	14	140.3	140.3	142.9	143.2	141.1	141.6	142.7	142.7	144.5	145.5	145.2
	15	153.4	151.8	151.1	150.1	149.2	147.3	147.0	146.0	145.1	145.2	144.6
	16	148.6	147.4	145.5	143.1	141.0	139.8	139.1	136.7	137.6	137.6	137.0
	17	139.4	136.3	135.6	138.3	136.5	135.2	134.2	133.4	134.1	135.5	140.1
	18	—	—	—	—	—	—	—	—	—	—	—
	19	136.7	134.9	135.3	133.5	129.0	128.2	125.9	124.9	127.9	127.9	127.5
	20	131.3	131.6	131.3	132.4	132.4	132.2	131.7	131.7	132.5	135.1	135.7
	21	138.3	138.3	138.3	138.3	135.8	134.8	134.8	133.7	134.9	134.9	134.6
	22	133.5	135.3	134.8	136.4	138.7	137.8	135.9	134.2	135.1	134.7	135.6
	23	143.6	142.9	142.9	142.1	142.1	142.1	139.6	140.6	140.8	144.1	146.3
	24	148.7	148.7	147.4	145.8	145.3	146.3	146.3	145.5	146.3	147.6	147.7
	25	—	—	—	—	—	—	—	—	—	—	—
	26	145.6	148.2	150.2	150.3	151.0	151.9	153.6	154.1	159.0	158.1	159.6
	27	160.9	159.0	159.6	158.0	156.8	155.4	154.1	154.4	155.7	157.4	157.5
	28	162.2	160.5	160.5	159.0	156.4	153.1	152.6	152.9	155.2	154.9	154.9
	29	160.0	158.3	156.1	154.6	153.5	153.5	151.5	152.6	153.1	153.1	152.2
	30	155.4	154.7	154.7	154.7	154.9	154.9	154.9	154.8	153.8	155.4	155.1
	31	158.6	156.6	154.8	153.4	153.4	153.2	150.3	151.2	151.5	153.2	151.8
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	146.13	145.78	145.35	144.67	143.25	142.33	141.63	141.18	142.31	142.77	142.92
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
JULY.	1	66.4	66.4	66.7	67.3	67.6	68.7	69.6	70.0	70.5	71.3	72.2
	2	68.1	68.4	68.5	69.5	70.6	71.5	72.3	72.7	73.4	74.0	74.7
	3	69.6	69.7	70.5	71.3	72.3	73.3	73.7	74.8	75.3	75.9	76.7
	4	—	—	—	—	—	—	—	—	—	—	—
	5	71.5	71.5	72.0	72.3	73.5	74.3	74.8	75.4	76.2	77.4	76.7
	6	72.7	72.5	72.5	72.5	72.5	72.8	73.0	74.0	74.6	75.2	75.5
	7	71.8	71.8	71.6	72.3	73.3	74.0	74.6	75.4	75.7	76.5	77.0
	8	73.3	73.3	73.6	74.0	75.6	76.7	77.4	78.0	78.0	77.5	78.3
	9	74.5	74.5	75.0	75.8	76.8	77.5	78.1	78.5	79.7	79.3	78.5
	10	76.7	75.3	75.4	75.4	75.5	76.3	76.5	77.0	77.5	78.2	78.1
	11	—	—	—	—	—	—	—	—	—	—	—
	12	75.5	75.7	76.3	77.1	77.2	77.5	77.1	77.3	77.7	78.5	79.0
	13	75.8	76.3	76.5	77.0	77.8	78.4	78.9	79.7	80.0	79.6	79.3
	14	72.0	71.9	72.0	72.4	72.7	73.2	73.3	73.2	73.4	73.4	73.6
	15	68.5	68.5	68.5	69.3	69.5	70.3	70.7	71.5	72.0	73.1	73.5
	16	70.9	71.1	71.3	72.0	73.0	73.7	74.5	75.4	75.6	75.5	76.6
	17	73.8	74.2	74.0	74.3	75.4	76.5	77.3	79.0	79.0	79.0	78.6
	18	—	—	—	—	—	—	—	—	—	—	—
	19	76.5	77.0	77.0	78.0	78.3	79.2	80.0	80.3	80.6	81.5	82.3
	20	77.0	77.6	77.9	78.3	78.0	78.4	78.4	78.2	78.4	78.5	78.6
	21	76.2	76.0	76.0	76.0	76.3	76.5	77.0	77.3	77.5	78.3	78.4
	22	76.7	76.5	76.5	76.2	76.3	76.5	76.7	77.2	77.3	77.7	77.5
	23	72.3	72.5	72.6	72.9	72.9	73.1	73.0	73.1	73.0	73.3	73.5
	24	69.5	69.3	70.0	70.2	70.5	70.8	71.0	71.0	71.1	71.5	71.5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	71.0	70.4	69.7	69.5	68.7	68.5	68.3	68.0	68.2	68.2	68.3
	27	63.5	63.9	64.1	65.5	66.0	66.5	66.7	66.7	66.7	66.5	66.5
	28	63.3	63.4	63.8	64.4	65.5	66.3	66.3	66.5	66.8	67.4	67.6
	29	64.5	65.3	65.9	66.4	66.7	67.4	67.7	68.3	68.5	68.6	69.3
	30	66.4	66.5	66.5	66.0	66.4	66.3	66.5	66.5	66.6	67.0	67.7
	31	64.6	65.1	65.3	65.9	67.0	67.3	67.5	67.9	68.0	68.5	68.5
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	71.08	71.16	71.33	71.77	72.27	72.82	73.18	73.63	73.91	74.30	74.55

* Omitted in the Means, on account of disturbance.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

ture, 1° 64.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
147°2	147°6	146°6	146°9	147°0	147°1	148°0	149°7	150°8	151°6	152°8	152°8	152°8	149°78	
147°8	147°7	141°8	142°3	141°7	142°0	142°7	143°6	144°1	144°3	144°3	144°5	146°4	148°7	144°43
140°5	141°8	138°2	137°7	138°2	139°3	140°0	135°0	—	144°0	144°1	144°1	143°2	144°0	141°60
138°2	139°5	—	—	—	—	—	—	—	—	—	—	—	—	—
136°2	136°6	137°5	138°2	138°2	138°5	138°5	140°3	140°3	140°3	133°9	130°5	138°8	140°2	139°10
142°3	142°3	142°4	142°6	140°4	140°8	141°4	140°8	141°5	141°8	142°6	142°4	140°7	132°4	141°81
138°3	136°9	136°9	135°0	135°9	138°3	135°4	136°5	138°3	137°3	138°8	140°0	140°0	140°1	137°96
135°3	135°3	135°6	135°6	132°9	132°6	134°5	135°9	136°4	136°5	136°5	136°5	138°3	139°9	135°68
155°4	161°0	163°5	165°4	161°0	98°3	139°4	122°4	137°0	80°5	132°6	143°2	134°0	143°0	137°68
143°6	141°1	140°9	141°2	133°7	134°2	134°3	134°3	—	—	—	—	—	—	—
137°7	137°8	137°8	137°9	133°0	134°7	135°4	136°4	127°8	124°2	131°9	135°5	140°7	139°1	136°14
134°1	135°7	135°7	135°7	134°9	137°2	137°7	135°7	136°2	137°2	138°2	140°7	141°5	141°4	136°18
145°2	148°4	147°9	146°8	147°2	148°9	146°4	146°4	142°8	143°8	143°8	145°6	152°0	153°4	145°14
144°6	145°7	144°9	145°4	145°4	145°4	145°6	145°6	145°6	145°7	145°7	146°3	147°5	148°6	147°01
138°5	137°0	137°1	138°0	137°3	137°3	136°9	138°1	137°5	138°5	139°3	137°5	138°3	137°4	139°38
140°1	142°7	144°1	145°1	143°2	138°0	136°1	136°1	—	—	—	—	—	—	—
127°5	129°1	129°1	126°7	127°7	128°6	129°0	129°4	130°0	130°8	131°3	131°6	131°3	131°3	129°90
135°1	135°7	135°7	135°0	133°7	134°4	133°2	134°8	133°9	134°2	134°2	134°4	135°2	137°1	133°70
134°6	135°0	134°2	134°4	134°4	133°3	132°5	133°7	120°9	128°1	129°5	132°6	134°8	135°6	133°99
135°6	136°5	136°5	136°7	137°4	137°4	132°2	119°5	134°3	136°9	135°2	142°9	143°7	145°2	136°10
144°2	146°3	145°1	143°9	143°9	144°1	145°1	147°3	145°7	145°7	145°7	148°1	148°1	150°1	144°34
147°6	147°7	146°7	146°7	146°7	146°7	145°5	140°5	—	—	—	—	—	—	—
159°6	160°5	157°1	156°6	155°1	155°6	155°0	155°4	142°7	143°0	142°5	142°5	144°3	144°5	145°65
155°5	157°5	156°9	155°6	155°6	155°5	155°6	156°4	154°8	155°3	155°3	159°9	158°3	158°8	154°97
154°9	154°9	155°0	155°0	155°0	154°0	154°2	154°5	154°1	155°7	155°7	153°8	158°2	159°8	156°77
152°2	152°2	151°4	151°1	150°8	151°5	150°6	148°3	150°1	150°4	150°4	151°6	151°3	153°1	155°92
155°1	155°0	154°3	153°3	152°5	154°1	153°5	149°7	153°6	153°6	154°8	155°0	155°9	156°2	154°37
151°8	151°8	151°3	151°3	151°3	151°8	149°7	151°1	152°6	152°9	154°8	154°6	154°8	156°5	153°02
142°92	143°49	143°12	142°86	142°03	142°35	141°85	141°25	141°65	141°96	142°17	143°26	144°81	145°57	143°11
TEMPERATURE OF THE VERTICAL FORCE MAGNET.														
71°5	72°2	72°5	72°5	72°2	71°9	71°5	71°1	70°7	69°7	69°3	68°6	68°4	68°0	69°77
74°5	74°7	74°9	75°0	75°3	74°0	73°6	73°3	72°8	72°1	71°5	70°9	70°5	70°0	72°17
76°5	76°7	76°7	76°7	76°5	76°3	75°0	74°5	—	—	—	—	—	—	—
77°0	76°7	76°5	76°2	75°7	75°5	75°2	74°9	74°5	73°5	73°0	72°5	72°1	71°5	73°83
75°4	75°5	75°4	75°2	74°9	75°3	74°7	74°5	74°5	74°5	74°5	74°0	74°0	73°6	74°65
77°0	77°5	77°5	77°5	77°5	77°0	76°1	75°7	75°3	75°5	74°5	73°5	73°5	73°3	73°90
78°0	78°3	78°2	78°3	78°1	77°6	77°5	77°1	76°8	76°5	75°8	75°5	75°0	74°6	76°45
79°0	78°5	78°5	78°5	78°5	78°5	79°5	79°5	79°4	77°6	78°2	77°7	77°0	76°8	78°58
78°6	78°1	78°0	77°7	77°5	77°3	77°1	77°0	—	—	—	—	—	—	—
79°0	79°0	78°9	78°7	79°0	79°3	78°7	78°3	78°6	77°5	77°1	76°6	76°3	75°7	77°61
79°5	79°3	78°7	78°4	78°0	77°2	76°8	76°3	75°7	74°8	73°8	73°6	72°8	72°4	76°97
73°2	73°6	72°7	72°5	72°3	71°6	71°5	71°0	70°5	70°1	69°6	69°3	69°1	68°5	71°79
73°5	73°5	73°5	73°3	73°1	73°0	72°6	72°1	72°0	72°3	72°0	71°5	71°3	70°7	71°51
76°6	76°5	76°3	76°1	76°1	76°5	76°7	76°0	75°3	74°5	74°4	74°4	74°4	73°7	74°67
79°0	78°6	78°6	78°6	79°0	78°6	78°4	78°1	—	—	—	—	—	—	—
81°5	82°3	82°5	82°3	80°9	81°0	80°5	80°2	77°8	77°7	77°5	77°0	76°9	76°7	77°29
78°5	78°6	78°7	78°6	78°4	78°0	77°7	77°6	77°5	77°3	76°8	76°5	76°5	76°5	79°67
78°4	78°4	78°0	77°7	78°0	78°1	77°9	78°0	77°5	77°3	76°7	76°4	76°4	76°6	77°83
77°7	77°5	77°5	77°0	76°5	76°5	76°3	75°7	75°0	74°5	74°0	73°2	73°0	72°1	77°25
73°4	73°5	73°7	74°0	74°0	73°4	72°7	72°5	72°5	71°6	70°5	70°5	70°0	69°5	75°99
71°5	71°5	71°3	71°0	71°0	71°0	71°0	70°8	—	—	—	—	—	—	72°52
68°4	68°3	68°4	68°0	67°6	67°3	66°7	66°4	73°5	73°0	73°0	72°8	72°5	72°2	71°29
66°7	66°5	66°8	66°8	66°8	66°5	66°0	65°6	65°7	65°2	64°7	64°2	64°0	63°5	67°45
67°7	67°6	67°4	67°0	67°3	67°5	67°0	67°0	66°5	66°0	65°6	65°4	65°0	64°4	65°63
69°2	69°3	69°1	69°1	69°0	69°2	68°7	68°2	68°5	68°3	67°8	67°8	67°3	66°7	66°02
67°5	67°7	68°1	68°2	68°3	68°0	67°8	67°5	67°3	66°6	66°5	66°0	65°5	65°2	67°87
68°5	68°5	68°5	68°3	68°2	67°6	67°4	67°3	—	—	—	—	—	—	66°87
—	—	—	—	—	—	—	—	67°0	66°5	66°0	65°5	65°2	65°0	66°94
74°55	74°61	74°55	74°41	74°28	74°05	73°08	73°35	73°18	72°73	72°28	71°83	71°55	71°13	72°98

VERTICAL FORCE.												
One Scale Division = '000055 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Guttin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
AUGUST.	2	156'5	155'0	152'5	151'9	155'1	154'9	154'1	148'8	149'6	149'6	147'4
	3	156'0	155'0	154'4	154'5	151'3	148'8	149'6	151'1	149'8	150'2	149'3
	4	141'4	146'5	144'1	142'0	140'6	139'3	139'3	140'1	141'8	140'7	141'9
	5	152'0	156'0	145'0	144'3	148'2	147'1	146'1	151'5	148'2	153'5	154'7
	6	151'9	151'9	145'8	143'2	143'9	136'9	137'4	138'5	140'1	139'8	137'9
	7	147'4	147'2	147'9	147'9	146'8	146'7	145'6	144'9	146'8	149'1	153'7
	8	—	—	—	—	—	—	—	—	—	—	—
	9	150'7	151'5	150'7	151'6	151'6	148'2	146'6	147'2	145'1	144'0	146'8
	10	147'1	146'4	147'4	145'6	143'5	142'6	139'6	139'4	139'5	138'2	138'5
	11	143'3	143'9	143'9	143'7	144'2	144'1	143'2	141'5	141'4	141'4	142'3
	12	149'4	148'5	148'2	146'8	145'1	143'3	143'1	142'9	142'9	142'1	141'8
	13	146'0	145'0	142'8	141'2	139'6	138'2	135'5	135'7	135'8	137'7	140'0
	14	141'5	140'8	140'1	139'8	136'2	139'0	139'2	139'2	138'1	138'1	138'7
	15	—	—	—	—	—	—	—	—	—	—	—
	16	138'0	137'1	131'9	133'5	132'1	132'9	131'7	129'9	131'1	132'8	134'4
	17	137'2	135'3	133'2	132'4	131'2	130'3	131'7	131'9	133'8	134'3	136'0
	18	145'0	145'0	144'8	142'7	141'7	145'3	144'7	145'7	148'1	149'9	148'9
	19	159'5	159'5	157'1	157'0	157'9	158'4	157'7	157'7	157'7	157'0	155'9
	20	155'1	153'7	153'3	153'3	151'8	150'6	152'0	151'7	151'4	150'4	150'4
	21	155'4	155'4	152'4	151'0	150'2	150'9	150'9	151'0	151'8	149'5	151'7
	22	—	—	—	—	—	—	—	—	—	—	—
	23	159'4	156'4	155'2	154'6	153'3	152'3	153'5	154'6	154'5	155'8	155'4
	24	154'7	154'6	153'3	151'5	151'3	152'1	150'8	151'6	152'9	155'4	153'0
	25	154'4	150'1	148'3	148'3	147'8	147'8	155'8	160'1	155'3	150'2	150'9
	26	142'2	147'4	153'0	153'5	151'2	148'5	148'3	147'8	146'8	146'3	144'8
	27	147'6	148'6	148'6	148'0	147'5	147'5	150'0	150'2	152'2	150'4	149'9
	28	140'1	148'8	148'5	148'2	145'9	145'7	148'6	148'2	149'1	149'0	149'5
	29	—	—	—	—	—	—	—	—	—	—	—
	30*	149'5	148'1	148'1	143'7	143'5	143'4	142'7	141'9	143'5	144'5	145'1
	31*	151'0	150'3	148'5	148'5	148'5	149'0	149'0	150'0	152'0	153'8	152'7
Hourly Means		148'82	149'15	147'60	146'94	146'17	145'47	145'62	145'88	145'99	146'06	146'40
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
AUGUST.	2	65'3	65'0	65'0	65'0	67'5	67'7	68'0	68'5	68'8	69'4	70'0
	3	66'2	66'2	66'5	67'3	68'3	68'5	68'6	68'6	69'0	69'5	69'7
	4	66'7	67'4	67'9	68'8	69'5	70'1	70'5	70'7	71'0	71'9	73'0
	5	68'3	68'8	69'6	70'5	71'3	71'5	72'0	72'3	73'0	73'5	73'2
	6	68'7	68'7	70'4	70'5	73'0	73'5	73'8	73'7	73'7	74'5	74'2
	7	69'5	69'3	69'0	69'5	70'0	70'5	71'4	71'7	72'0	72'5	72'3
	8	—	—	—	—	—	—	—	—	—	—	—
	9	67'2	67'0	67'0	67'3	67'5	68'5	69'1	69'6	70'6	71'5	72'0
	10	70'5	70'6	70'6	70'6	71'6	72'6	73'3	73'4	73'7	74'5	74'5
	11	71'9	71'7	72'0	71'8	71'7	71'8	72'2	72'4	72'5	72'5	72'6
	12	69'0	69'6	69'4	69'4	70'5	71'5	72'0	72'5	72'8	73'5	73'8
	13	71'2	71'5	72'1	73'2	73'5	74'4	74'7	74'5	75'0	75'0	74'7
	14	72'5	72'5	72'7	73'4	74'3	74'5	74'7	75'4	75'6	76'0	76'3
	15	—	—	—	—	—	—	—	—	—	—	—
	16	74'5	74'5	75'3	76'7	76'5	77'0	77'4	78'0	78'0	78'5	78'6
	17	74'5	75'0	75'3	75'4	75'3	75'5	75'5	75'5	75'7	75'5	75'4
	18	69'5	69'4	69'5	69'5	69'3	69'5	69'5	69'5	69'5	69'7	69'6
	19	64'4	64'0	64'1	63'5	64'3	64'4	64'5	64'7	64'7	65'3	65'4
	20	63'5	64'1	63'8	64'3	65'5	66'0	66'5	66'9	67'4	68'0	68'3
	21	64'7	65'0	65'8	66'5	66'7	66'8	66'9	67'3	67'5	68'1	69'0
	22	—	—	—	—	—	—	—	—	—	—	—
	23	65'5	66'5	67'3	68'1	68'6	68'7	68'7	69'0	69'3	69'5	69'7
	24	65'5	66'0	66'0	66'5	67'2	68'5	68'5	68'7	69'0	69'8	70'1
	25	66'0	65'8	66'4	67'5	69'0	69'5	70'0	70'5	71'7	72'5	71'6
	26	66'6	66'6	66'8	67'3	68'3	68'5	69'3	69'6	70'4	71'5	72'0
	27	69'3	68'8	68'8	68'6	68'6	68'6	68'5	68'3	68'5	68'7	69'4
	28	67'3	67'2	67'5	67'0	69'0	69'0	69'3	69'0	69'3	69'5	70'2
	29	—	—	—	—	—	—	—	—	—	—	—
	30*	67'0	67'0	68'0	69'0	69'8	70'3	70'5	70'7	70'8	71'3	71'0
	31*	66'3	66'3	66'5	66'4	66'5	66'6	67'0	67'0	66'7	66'8	66'7
Hourly Means		68'26	68'38	68'70	69'13	69'87	70'30	70'62	70'85	71'20	71'70	71'96

* The observations on the 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
148°6	147°4	147°6	146°6	146°7	146°7	147°0	147°6	147°7	150°1	152°8	156°7	150°45
149°3	149°6	148°5	148°0	146°5	145°6	144°2	143°2	143°1	146°0	151°9	147°5	145°6
141°9	140°0	140°0	139°9	141°8	146°8	142°5	112°0	114°6	137°2	133°7	124°1	143°0
154°7	148°8	147°2	147°2	146°0	143°2	139°8	147°3	148°2	143°7	139°3	142°6	142°8
137°9	145°4	144°5	144°9	144°3	141°8	132°6	135°9	151°2	151°5	151°5	143°4	144°4
153°7	151°7	146°7	146°7	137°0	137°5	137°5	—	—	—	—	—	—
146°8	146°1	—	—	—	—	—	142°8	144°3	149°4	145°4	149°5	150°3
138°5	138°6	146°1	146°4	143°9	144°0	143°6	135°5	138°7	140°4	143°0	144°8	145°9
142°3	142°4	138°6	137°6	139°7	138°8	138°8	139°4	138°8	139°8	141°1	141°3	141°1
141°8	144°2	142°6	142°0	142°1	142°7	143°0	143°9	142°2	140°4	141°0	146°3	146°1
140°0	139°7	142°1	146°1	140°6	140°3	140°3	140°3	141°1	141°1	142°7	145°2	143°4
138°1	138°7	138°3	138°3	138°3	138°8	139°0	139°0	139°1	140°5	141°5	140°0	141°5
—	—	135°5	136°2	135°6	136°6	137°6	141°6	—	—	—	—	—
134°4	133°3	131°3	131°3	131°1	129°6	130°1	129°9	133°1	134°4	135°0	135°8	134°8
136°0	138°5	136°8	136°1	135°3	135°7	135°7	138°9	137°3	139°6	140°0	140°0	141°2
148°9	153°1	152°1	152°0	152°7	146°0	150°9	153°3	155°0	155°4	155°4	155°1	155°1
155°9	155°4	155°1	153°8	155°2	154°6	155°2	155°2	155°2	156°0	154°6	154°2	150°8
150°4	150°4	150°6	150°6	150°6	150°6	151°1	151°1	151°0	152°8	152°8	153°6	153°5
151°7	149°7	145°7	145°6	145°6	147°8	147°8	122°9	—	—	—	—	—
155°4	152°7	150°0	150°0	151°2	152°7	153°1	151°6	147°3	140°6	148°5	149°1	150°3
153°0	152°3	150°7	150°7	150°5	152°2	152°2	151°4	152°2	152°0	145°7	144°7	147°9
144°8	144°8	153°6	152°9	151°8	151°8	151°8	146°1	146°3	135°4	134°8	135°3	131°2
149°9	149°5	144°8	144°2	143°6	142°6	144°8	143°6	146°2	141°6	145°2	144°3	145°5
149°5	149°3	142°8	143°0	143°8	145°2	148°0	146°6	143°0	145°6	145°6	146°6	147°4
—	—	147°1	147°1	147°1	147°0	147°9	148°5	146°7	147°4	145°8	135°0	134°0
145°1	147°8	148°3	148°3	144°4	146°0	145°8	145°8	148°9	148°9	148°6	147°0	145°0
152°7	152°0	151°4	151°7	149°4	149°1	149°3	149°3	145°8	145°4	146°1	146°1	149°3
—	—	145°54	145°11	144°79	144°32	144°51	141°40	142°63	143°85	143°73	143°65	144°36
146°40	146°31	—	—	—	—	—	—	—	—	—	—	146°32
—	—	—	—	—	—	—	—	—	—	—	—	145°44

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

69°9	70°0	69°7	70°1	70°1	70°4	68°4	67°9	67°9	66°8	66°5	66°0	68°10
70°2	70°5	70°5	70°5	70°5	70°4	70°3	70°3	70°0	68°0	67°4	66°5	68°89
72°7	72°5	72°5	72°5	73°2	73°4	72°9	72°7	71°7	71°0	70°5	70°0	71°07
72°5	72°4	72°4	72°3	71°5	71°0	70°7	69°8	69°5	69°3	69°0	68°6	71°06
72°8	72°5	72°7	72°2	72°0	71°7	71°5	71°0	70°4	70°2	70°3	70°3	71°99
71°8	71°6	71°5	71°3	71°0	70°8	—	—	—	—	—	—	70°07
72°2	72°4	72°5	72°3	72°3	72°0	67°3	67°3	67°1	67°3	67°3	67°7	70°64
74°5	74°3	74°2	74°5	74°1	74°0	72°5	72°3	72°0	72°0	71°5	71°5	73°09
72°7	72°5	72°5	72°0	71°7	71°2	70°7	70°4	69°9	69°5	69°4	69°2	71°55
73°9	73°7	73°3	73°1	72°8	72°5	72°4	72°2	72°0	72°0	71°6	71°6	72°03
74°6	74°5	74°4	74°2	74°2	74°0	73°8	73°3	73°3	73°3	73°0	73°0	73°75
76°5	76°3	75°7	75°7	75°7	75°6	—	—	—	—	—	—	75°29
—	—	—	—	—	—	77°3	76°5	76°1	75°7	76°0	75°5	77°22
79°5	79°2	79°0	79°2	78°3	77°6	77°1	76°7	76°3	76°0	75°3	74°7	77°49
75°5	75°3	75°5	75°2	75°2	74°4	73°5	72°8	72°3	71°7	71°3	71°0	74°49
69°7	69°6	69°6	68°5	68°5	68°5	68°1	67°9	67°5	67°2	66°5	66°5	68°23
65°4	65°7	65°7	66°8	66°5	65°5	64°9	64°4	64°3	64°5	64°4	64°4	67°72
68°3	68°5	68°5	68°5	68°5	68°5	68°8	68°5	68°5	68°5	68°5	68°5	67°72
69°0	70°0	70°5	69°7	69°5	69°5	—	—	—	—	—	—	66°45
—	—	—	—	—	—	68°5	67°7	67°4	66°7	66°3	65°7	67°74
69°7	70°0	70°0	69°8	69°5	69°1	68°5	67°7	67°5	66°8	66°2	65°8	68°42
70°1	70°5	70°0	69°0	68°6	68°5	68°1	67°9	67°5	67°2	66°5	66°5	68°23
71°6	71°6	70°8	70°6	69°8	69°8	69°2	69°5	69°0	69°0	68°8	67°4	69°54
72°0	71°6	71°4	71°3	71°3	71°0	71°0	71°4	71°0	70°6	70°4	70°3	70°05
69°4	69°5	71°4	70°8	70°7	70°5	70°0	69°7	69°7	70°1	69°7	69°7	69°68
70°2	70°3	—	—	—	—	—	—	—	—	—	—	—
71°0	71°5	—	—	—	—	68°4	68°3	68°3	68°3	67°7	67°4	68°83
66°8	66°7	70°6	69°6	69°5	69°0	68°6	68°4	68°2	67°5	67°0	67°0	69°35
—	—	66°4	66°0	65°8	65°6	65°4	64°3	63°8	63°5	63°1	63°0	65°80
71°96	71°98	71°73	71°48	71°27	70°97	70°51	70°18	69°88	69°54	69°22	68°88	70°44

the induced magnetism

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Contin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
SEPTEMBER.	1 ^a	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2	—	—	—	—	—	151'6	149'3	149'3	149'3	148'3	146'3
	3	151'3	152'7	151'8	151'8	149'6	148'2	145'8	144'9	146'7	146'4	146'3
	4	153'8	151'7	152'5	153'8	154'2	154'9	157'8	157'7	157'8	157'8	160'9
	5	—	—	—	—	—	—	—	—	—	—	—
	6	160'1	161'4	157'5	156'4	155'3	155'9 ^b	154'9	154'0	154'5	155'0	154'3
	7	158'4	157'0	156'4	157'8	152'7	152'6	150'0	148'7	151'0	152'3	151'3
	8	153'1	152'3	151'9	151'4	149'5	147'4	144'9	144'9	144'9	144'8	143'5
	9	152'8	151'4	151'4	151'4	151'9	151'9	155'3	155'3	152'9	163'8	164'7
	10	163'9	164'1	158'9	158'7	156'9	154'9	154'9	155'9	155'9	155'9	154'0
	11	161'1	164'8	161'5	160'2	158'8	158'1	158'1	159'0	159'0	158'5	162'1
	12	—	—	—	—	—	—	—	—	—	—	—
	13	143'8	148'5	131'4	131'7	150'0	153'2	162'7	165'4	169'7	173'8	175'1
	14	170'8	173'3	172'2	169'6	169'6	169'6	169'6	169'6	170'3	170'3	168'3
	15	174'6	173'4	171'5	170'0	167'8	167'8	168'7	169'6	169'6	166'8	165'7
	16	170'9	170'5	167'9	165'4	163'9	163'5	166'5	162'8	164'1	163'4	163'4
	17	163'8	163'8	164'4	163'1	160'3	162'7	163'8	163'6	162'0	161'3	160'4
	18	161'9	161'9	161'2	159'3	159'5	159'5	158'5	159'6	161'2	159'7	159'8
	19	—	—	—	—	—	—	—	—	—	—	—
	20	162'1	163'3	163'3	162'5	162'0	162'0	161'6	160'7	162'8	164'9	165'4
	21	164'5	163'8	162'5	161'3	161'1	161'1	159'4	159'4	159'3	159'5	159'2
	22	166'1	164'9	162'2	160'6	161'6	159'4	159'5	162'8	167'2	166'9	163'1
	23	155'3	158'9	160'3	155'6	156'1	156'4	157'6	160'6	161'7	157'0	154'8
	24 ^a	143'6	— ^f	138'8	154'0	150'5	172'5	197'6	195'7	184'1	191'7	190'4
	25	175'0	175'0	174'5	173'5	172'6	172'5	171'1	171'9	171'4	171'4	169'7
	26	—	—	—	—	—	—	—	—	—	—	—
	27 ^a	— ^f	121'3	128'3	154'5	164'7	160'2	164'3	169'7	169'7	169'7	162'3
	28	165'3	166'3	167'6	162'6	162'4	163'1	165'1	168'5	169'6	170'6	176'9
	29	173'3	175'7	174'6	173'5	171'5	171'3	175'9	193'2	198'7	200'5	199'5
	30	178'2	180'3	178'9	178'3	177'9	176'2	176'2	174'9	173'1	175'6	173'5
Hourly Means		162'73	163'41	161'56	160'39	160'24	160'10	160'81	161'95	162'88	163'46	163'27
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
SEPTEMBER.	1 ^a	62'5	62'3	62'5	62'5	63'3	63'5	63'7	63'9	64'5	65'3	66'3
	2	63'3	63'4	64'3	65'0	65'6	66'2	66'5	67'0	67'7	68'4	68'8
	3	66'1	66'5	66'4	66'3	67'0	68'0	68'4	68'7	69'2	69'9	70'2
	4	65'5	65'0	64'9	64'7	64'7	64'9	64'9	65'0	64'6	64'6	64'5
	5	—	—	—	—	—	—	—	—	—	—	—
	6	62'7	62'5	63'5	63'8	64'4	64'5	64'5	64'7	65'3	65'7	66'1
	7	63'5	64'0	64'5	64'7	66'6	67'3	67'2	67'2	67'3	67'5	67'6
	8	66'0	66'2	66'7	66'7	67'6	68'7	69'5	70'0	70'2	70'5	70'7
	9	65'7	65'3	64'9	64'7	64'9	65'0	64'7	65'0	65'2	65'4	65'5
	10	60'5	61'0	61'7	62'6	63'0	63'3	63'5	64'0	64'3	64'5	64'7
	11	60'7	61'0	61'5	61'7	62'5	63'3	63'3	63'7	63'8	64'5	64'5
	12	—	—	—	—	—	—	—	—	—	—	—
	13	62'7	62'4	62'3	62'1	62'3	62'3	62'3	62'0	61'7	61'5	61'8
	14	56'5	56'3	56'3	56'3	56'5	56'5	56'6	57'1	57'7	58'0	58'2
	15	55'1	56'0	57'1	57'2	58'0	58'3	58'5	58'8	59'0	59'5	60'0
	16	57'4	57'8	58'2	58'5	59'0	59'8	60'2	60'5	60'7	61'5	61'7
	17	59'9	59'5	60'2	60'5	61'5	62'1	62'4	62'9	63'3	63'6	63'9
	18	62'5	62'4	62'5	62'5	62'7	62'9	63'3	63'5	63'5	63'5	63'6
	19	—	—	—	—	—	—	—	—	—	—	—
	20	60'8	60'7	60'7	60'7	60'7	60'9	61'0	61'4	61'5	61'5	61'6
	21	60'0	60'0	60'8	61'3	61'5	61'4	61'9	62'5	62'5	63'0	63'5
	22	58'8	59'2	59'0	60'0	61'0	61'0	61'1	61'4	61'5	62'1	62'6
	23	62'5	61'3	61'7	62'5	62'6	63'0	63'4	63'7	64'5	65'5	65'8
	24 ^a	66'0	— ^f	63'5	63'1	63'0	63'1	63'1	63'3	63'1	63'0	62'9
	25	60'0	59'6	59'2	59'0	59'5	59'6	60'0	60'2	60'1	60'0	60'5
	26	—	—	—	—	—	—	—	—	—	—	—
	27 ^a	— ^f	63'7	64'7	62'5	62'5	63'2	63'5	64'2	64'5	65'5	66'4
	28	61'5	61'7	61'5	62'7	62'7	62'5	62'5	62'2	62'3	62'5	62'4
	29	57'0	57'4	57'2	57'2	57'7	58'0	58'2	58'4	58'5	58'5	59'0
	30	56'0	56'0	57'1	57'6	58'0	58'4	58'6	59'0	59'1	59'1	59'0
Hourly Means		60'97	60'99	61'27	61'51	62'02	62'35	62'55	62'81	62'99	63'29	63'47

^a The observations on the 1st and 2nd days are omitted from the Means, the readings having been affected to an uncertain amount (up to 4^h on the 2nd) by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

^b Eight minutes late.

ature, 1° 64.

10 ^h .	11 ^h .
Sec. Div.	Sec. Div.
146°3	147°2
146°3	150°2
160°9	159°1
154°3	153°9
151°3	150°2
143°5	143°6
163°7	165°0
154°0	154°6
162°1	155°6
173°1	173°5
168°3	168°2
165°7	164°4
163°4	163°4
160°4	159°0
159°8	162°2
165°4	166°0
159°2	158°7
163°1	162°0
154°8	157°1
190°4	182°7
169°7	170°7
162°3	159°5
176°9	177°6
199°5	191°1
173°5	171°9
163°27	162°64

66°3	65°7
68°8	69°3
70°2	70°4
64°5	64°6
66°1	66°3
67°6	67°5
70°7	70°8
65°5	65°5
64°7	65°1
64°5	64°5
61°8	60°6
58°2	58°5
60°0	60°5
61°7	62°4
63°9	63°6
63°6	63°5
61°6	61°5
63°5	63°5
62°6	63°1
65°8	65°8
62°9	62°8
60°5	60°5
66°4	66°5
62°4	61°5
59°0	58°5
59°0	58°5
63°52	63°47

p to 4^h on the 2nd) by
utes late.

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.													
12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Daily and Monthly Means.	
Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
147°2	147°3	147°3	147°3	147°3	147°9	147°9	147°9	148°9	148°9	150°3	151°4	148°47	
151°1	151°1	146°1	147°2	147°7	149°4	149°4	150°0	151°0	152°6	149°8	150°1	149°22	
167°1	157°8	153°9	156°0	158°6	156°7	—	—	—	—	—	—	156°35	
153°8	152°0	151°1	151°6	151°6	151°0	151°0	155°2	153°3	155°6	157°8	157°8	154°78	
150°4	148°4	148°4	152°1	151°7	152°4	151°5	149°1	149°5	149°5	150°8	152°1	151°85	
143°0	143°9	144°6	143°7	143°9	145°0	146°5	148°9	149°7	149°7	149°0	151°9	147°17	
163°1	162°2	166°8	162°8	159°8	158°5	158°6	159°9	159°7	160°8	160°3	160°3	158°36	
154°6	154°6	155°1	155°3	156°8	156°8	156°6	156°6	156°8	155°5	156°6	164°6	157°02	
155°6	156°0	156°0	156°5	156°7	156°7	—	—	—	—	—	—	155°08	
173°3	169°8	169°9	169°5	170°0	170°1	165°1	162°4	164°6	168°5	168°5	170°8	162°55	
168°2	168°2	169°8	168°3	169°2	169°6	169°6	170°5	171°2 ^d	172°0	172°0	172°8	170°12	
163°4	162°7	164°5	164°9	165°5	165°8	164°8	168°8	166°8	168°7	167°8	168°2	167°49	
164°4	162°5	163°8	166°3	152°6	154°9	162°0	162°3	162°3	162°3	158°8	160°7	163°28	
159°7	157°5	156°5	158°3	158°8	159°2	158°4	158°7	156°8	159°4	160°3	160°3	160°50	
162°5	162°5	159°3	161°3	159°3	158°3	—	—	—	—	—	—	160°66	
167°9	167°1	165°9	162°3	161°4	159°6	160°1	160°6	161°3	161°3	163°6	164°9	163°02	
158°7	158°3	159°2	159°2	159°2	160°9	160°6	161°8	161°8	163°0	163°0	163°7	160°80	
160°2	156°2	157°8	158°1	157°7	153°6	157°8	154°9	158°8	158°2	158°9	157°8	160°26	
157°7	166°2	158°4	159°1	158°1	158°1	153°8	139°3	122°7	132°3	129°3	107°5	151°41	
190°8	186°5	182°3	174°1	174°1	171°9	162°2	160°5	164°2	171°0	171°7	171°9	173°17	
168°5	168°5	167°8	166°6	168°0	169°0	—	—	—	—	—	—	162°50	
159°5	159°2	160°8	160°7	163°9	168°8	156°4	134°4	128°3	155°0	141°4	106°9	160°02	
177°6	177°3	186°8	174°9	170°4	172°0	167°2	166°7	167°0	170°6	166°4	170°6	170°13	
181°8	202°0	173°1	180°4	177°1	177°4	177°4	170°5	170°3	175°6	175°6	176°7	180°70	
171°9	171°9	172°2	171°5	172°0	172°3	172°3	171°2	172°7	172°7	172°5	172°5	174°20	
162°02	162°58	161°23	161°18	160°28	160°33	159°64	157°82	157°10	159°51	157°37	156°53	160°79	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
65°5	67°0	66°3	65°8	65°6	65°5	65°3	65°0	65°0	64°5	64°2	63°5	63°55	
69°5	69°2	69°0	69°3	69°2	68°8	68°5	68°3	68°0	67°6	67°3	66°6	67°37	
69°7	69°5	69°5	68°7	68°5	68°2	67°7	66°8	66°6	66°3	65°8	65°3	67°90	
64°4	64°3	64°6	64°5	64°4	64°3	—	—	—	—	—	—	64°42	
66°4	66°3	66°4	66°2	66°0	65°5	65°2	64°8	64°8	64°5	64°5	64°2	64°95	
67°4	67°0	66°9	66°9	66°7	66°5	66°6	66°5	66°5	66°5	66°7	66°5	66°48	
70°5	71°0	70°5	70°9	70°7	70°0	69°0	68°5	68°0	67°8	67°2	66°3	68°90	
65°5	65°4	65°0	64°7	64°5	64°3	63°7	63°1	62°6	62°0	61°6	61°3	64°40	
65°0	64°6	64°8	64°0	63°6	63°5	62°8	62°5	62°0	61°5	61°1	61°1	63°11	
64°5	64°5	64°0	63°8	63°6	63°3	—	—	—	—	—	—	63°27	
60°1	60°0	59°6	59°0	58°8	58°5	58°5	58°0	58°0	58°0	57°6	57°1	60°30	
58°8	58°6	58°5	58°2	58°0	57°6	57°2	56°8	56°5	56°3	56°0	55°3	57°18	
61°0	61°3	60°8	60°4	60°0	59°8	59°9	59°2	59°0	58°7	58°2	57°9	58°93	
62°5	62°3	62°0	61°5	61°0	60°7	60°5	60°3	60°1	60°1	60°0	60°0	60°36	
63°5	63°0	63°3	63°3	63°0	62°5	62°3	62°5	62°5	62°6	62°6	62°7	62°38	
63°3	63°9	63°7	63°7	63°6	63°6	—	—	—	—	—	—	62°66	
61°5	61°5	61°3	61°8	61°5	61°2	60°7	60°5	60°3	60°2	60°1	60°0	60°98	
63°6	63°6	63°2	62°5	62°4	62°2	61°4	60°7	60°4	60°0	59°5	59°1	61°69	
64°0	64°5	64°5	63°7	63°4	62°7	62°5	62°5	62°7	62°4	62°0	62°3	62°00	
65°7	65°6	65°5	65°3	65°5	65°4	64°6	64°5	64°6	64°4	64°4	64°5	64°26	
62°8	62°5	62°8	62°8	62°1	62°0	61°8	61°6	61°5	61°3	61°3	61°2	62°63	
60°5	61°0	61°0	61°0	61°0	60°7	—	—	—	—	—	—	60°37	
66°4	66°5	66°4	65°7	65°5	65°0	64°7	63°9	63°6	63°0	62°6	62°1	64°47	
61°3	60°9	60°7	60°5	59°7	59°4	59°0	58°3	57°7	57°5	57°2	57°3	60°65	
59°2	59°5	59°5	59°8	59°8	58°2	58°1	57°5	57°4	57°2	56°7	56°3	58°12	
58°2	58°6	59°0	59°0	58°5	58°6	58°2	58°4	58°8	58°7	59°0	58°5	58°33	
63°48	63°50	63°38	63°15	62°92	62°58	62°17	61°84	61°67	61°50	61°32	61°10	62°35	

* Fifteen minutes late.

* Three minutes late.

* Omitted in the Means, on account of disturbance.

* Off scale.

VERTICAL FORCE.												
One Scale Division = '000056 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Gutting- ton Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
OCTOBER.	174°1	173°7	174°7	170°5	169°4	169°7	168°6	168°6	169°5	169°5	172°6	174°4
	175°6	175°5	174°9	172°9	171°3	169°7	169°6	169°6	166°6	164°1	164°5	165°0
	174°1	173°4	171°4	166°1	167°5	166°8	167°5	165°7	164°5	163°1	162°5	163°4
	164°0	165°3	165°2	165°3	165°0	163°1	161°6	161°5	161°5	161°5	161°7	159°6
	163°0	163°0	163°0	164°8	164°6	163°3	164°6	166°0	165°7	164°2	163°9	163°9
	163°1	162°0	164°0	164°0	163°8	161°9	162°5	162°5	163°2	163°2	163°2	163°3
	161°2	161°2	161°2	158°6	157°9	157°1	158°4	158°4	162°8	166°9	165°3	167°4
	167°3	167°3	167°1	165°9	163°7	161°8	161°8	163°7	163°7	164°2	163°3	163°3
	173°3	173°3	172°3	172°3	170°7	170°7	170°7	169°8	172°2	171°8	170°9	170°1
	173°2	173°2	173°2	173°2	170°9	170°0	170°0	173°0	174°9	176°7	173°7	173°8
	46°3	163°5	153°8	145°8	167°4	173°3	180°0	185°7	192°9	187°4	183°7	176°4
	181°2	180°6	179°7	172°0	179°0	178°3	179°4	179°5	181°7	181°7	179°8	178°7
	178°9	176°1	176°1	177°1	180°8	180°8	184°7	187°5	187°5	184°5	183°6	181°0
	176°2	175°0	175°0	173°3	172°7	172°7	172°4	175°5	175°4	173°1	170°8	170°5
	161°4	165°5	165°5	164°3	162°9	164°3	165°4	167°1	166°5	166°9	165°6	166°9
	163°6	165°4	167°2	162°5	163°7	163°0	164°4	168°1	164°7	165°5	166°4	166°5
	172°6	175°0	171°8	169°4	169°4	169°4	169°4	171°8	171°8	168°7	168°7	168°8
	169°9	170°8	174°1	174°4	173°2	171°2	170°8	172°4	172°5	172°6	172°5	172°2
	174°1	174°2	176°4	176°3	176°6	176°6	176°6	177°6	179°0	182°2	184°4	182°7
	137°3	—	213°5	152°0	184°9	188°5	219°8	209°3	199°0	181°9	174°2	204°2
	180°4	180°7	161°3	188°8	200°6	189°5	186°9	191°9	203°5	196°5	190°3	187°9
	187°1	189°0	183°0	185°6	185°7	188°4	187°9	188°2	188°9	188°8	188°0	188°9
	194°7	197°2	195°7	193°9	195°2	194°4	195°3	193°3	193°3	190°6	190°6	191°7
	193°4	194°2	197°1	192°3	189°4	187°4	187°4	187°7	188°1	184°5	183°9	183°9
	183°1	183°1	183°1	182°8	177°6	175°4	181°3	180°4	181°2	180°0	178°5	179°6
	181°4	181°9	182°2	179°8	177°3	173°4	173°4	173°4	173°4	174°4	174°4	174°4
	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	174°20	174°62	174°43	172°77	172°35	171°49	172°14	172°90	173°16	172°57	172°02	172°15
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
OCTOBER.	58°0	58°8	59°7	59°4	59°0	59°0	59°0	59°1	59°0	59°0	59°0	59°0
	55°2	55°2	55°0	56°8	57°6	58°0	58°2	58°5	59°2	60°0	60°5	60°5
	55°3	56°0	56°4	54°8	58°2	59°0	59°3	60°0	60°4	60°6	61°0	61°2
	59°8	59°7	59°7	60°0	60°0	60°5	61°4	61°5	62°3	62°9	63°5	63°5
	61°5	61°3	61°2	61°0	60°7	60°7	60°9	61°0	60°9	61°2	61°2	61°1
	61°5	61°5	61°3	60°8	60°7	60°8	60°8	61°0	60°8	60°9	61°0	61°0
	61°5	61°4	61°5	61°3	61°5	61°7	62°1	62°3	62°3	62°3	62°4	62°5
	59°8	60°0	60°2	60°2	60°4	60°4	60°4	60°5	60°5	60°5	60°7	60°7
	55°2	55°5	56°0	56°8	57°0	56°7	56°6	56°7	56°5	56°5	56°6	56°7
	55°4	55°0	55°0	55°0	55°2	55°4	55°6	55°2	55°0	55°1	55°2	54°7
	53°8	54°0	55°0	56°5	54°6	54°5	54°4	54°3	54°4	54°7	54°5	55°0
	51°5	51°3	51°3	53°7	52°7	52°6	53°0	53°3	53°3	53°3	53°3	53°3
	48°2	48°2	50°0	49°5	49°8	50°5	50°9	50°9	51°2	51°5	51°6	51°8
	51°3	51°5	52°0	53°4	53°7	54°2	54°4	55°0	55°4	56°3	57°0	57°3
	56°7	56°2	56°5	57°2	57°8	58°6	59°0	59°0	59°5	60°5	61°0	61°2
	60°0	59°4	59°6	59°6	59°5	59°8	59°8	60°0	60°2	60°3	60°5	60°4
	55°3	55°0	59°0	56°7	56°3	56°8	57°0	57°0	57°4	58°0	58°7	58°8
	57°2	56°5	55°2	55°2	55°4	55°5	55°4	55°2	55°5	56°0	55°5	55°4
	52°7	52°7	52°4	52°2	52°2	52°2	52°2	52°2	52°5	53°0	53°2	53°0
	54°2	—	54°0	53°7	54°7	54°9	55°2	55°4	56°4	57°2	58°1	58°2
	57°2	56°2	56°0	56°2	56°5	56°6	56°7	56°6	56°0	56°2	55°8	55°2
	50°1	50°0	53°1	50°8	50°6	50°2	50°5	49°2	50°1	50°2	50°2	49°6
	44°8	44°2	44°8	45°0	45°4	46°1	46°1	46°5	47°2	48°0	48°0	48°4
	46°4	46°6	47°6	47°4	48°0	48°4	48°9	49°0	49°5	50°5	50°7	50°4
	49°0	49°2	49°2	49°5	51°0	51°4	52°0	52°1	52°2	53°2	54°1	53°3
	52°0	51°5	51°5	52°0	52°5	53°5	54°2	54°9	55°2	55°3	55°9	55°5
	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	54°80	54°73	55°26	55°46	55°59	55°90	56°15	56°33	56°49	56°91	57°16	57°10

* Omitted in the Means, on account of disturbance.

* Off Scale.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
Se. Div. 172'6 164'5	Se. Div. 174'4 165'0	Se. Div. 174'4 166'0	Se. Div. 170'1 166'7	Se. Div. 170'1 166'7	Se. Div. 170'8 168'7	Se. Div. 171'2 168'7	Se. Div. 172'3 168'9	Se. Div. 172'3 168'9	Se. Div. 168'8 169'9	Se. Div. 169'9 172'0	Se. Div. 172'0 172'9	Se. Div. 172'9 172'9	Se. Div. 172'9 172'9	Se. Div. 171'41 169'76
162'5 161'7 163'9 163'2 165'3 163'3	163'4 159'6 163'9 163'3 167'4 163'3	163'4 162'5 163'9 164'0 163'2 170'2 161'3	163'5 162'2 163'9 163'7 163'2 173'4 165'6	163'5 162'2 163'9 163'7 163'2 164'3 165'6	163'5 162'2 163'9 163'7 161'6 164'0 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6	163'5 162'2 163'9 163'7 162'2 164'5 165'6
170'9 173'7 183'7 179'8 183'6 170'8	170'1 173'8 176'4 178'7 181'0 170'5	170'1 173'8 176'4 178'7 181'0 170'5	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4	171'8 173'4 184'4 182'1 182'3 172'4
165'6 166'4 168'7 172'5 184'4 174'2	166'9 166'5 168'8 172'2 182'7 204'2	166'9 166'5 168'8 172'2 182'7 204'2	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5	163'1 166'4 166'5 166'7 173'0 184'9 195'5
190'3 188'0 190'6 183'9 178'5 174'4	187'9 188'9 191'7 183'9 179'6 174'4	187'9 188'9 191'7 183'9 179'6 174'4	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5	185'0 190'0 191'6 185'7 180'4 174'5
172'02	172'15	172'64	172'86	172'85	172'84	172'97	172'82	170'82	171'47	171'77	171'40	170'87	170'93	172'46

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

59'5 60'5 61'0 63'5 61'2 61'0 62'4 60'7	59'0 60'5 61'2 63'5 61'1 61'0 62'5 60'7	58'7 60'0 60'5 62'8 61'1 61'0 62'5 60'7	58'8 59'8 60'5 62'5 61'0 61'1 62'3 60'5	58'4 59'6 60'3 62'3 61'0 61'5 61'5 60'5	58'2 59'4 60'3 62'3 61'5 61'5 61'4 60'5	58'0 59'4 60'3 62'1 61'5 61'4 61'3 60'5	57'4 57'4 60'3 62'1 61'5 61'4 61'3 60'5	57'1 57'0 60'0 62'0 61'5 61'4 62'3 56'0	56'8 56'4 60'0 61'9 61'5 61'4 60'5 55'9	56'4 56'2 60'0 61'9 61'5 61'6 60'0 55'2	55'6 55'2 60'0 61'7 61'3 61'3 59'8 55'8	55'6 55'2 60'0 61'7 61'3 61'3 59'8 55'8	55'6 55'2 60'0 61'7 61'3 61'3 59'8 55'8	58'41 58'12 59'58 61'79 61'17 61'17 61'76 59'34
56'6 55'2 54'5 53'3 51'6 57'0	56'7 54'7 55'0 53'3 51'8 57'3	57'0 55'0 54'8 52'3 52'0 57'2	56'9 54'8 54'6 51'7 51'5 56'4	56'7 54'8 54'6 51'2 51'3 56'2	56'4 54'8 54'6 51'2 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0	56'2 54'7 54'6 50'6 51'3 56'0
61'0 60'5 58'7 55'5 53'2 58'1	61'2 60'4 58'8 55'4 53'0 58'2	61'4 59'0 59'5 55'2 52'4 58'2	61'0 59'0 59'5 55'0 52'2 57'5	61'1 59'2 59'7 55'3 52'0 56'9	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5	61'1 59'2 59'7 55'3 52'4 56'5
55'8 50'2 48'0 50'7 54'1 55'9	55'2 49'6 48'4 50'4 53'3 55'5	55'7 49'0 48'5 50'2 53'4 55'8	55'7 48'6 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5	55'7 48'4 48'2 49'5 53'4 55'5
57'16	57'10	57'08	57'07	56'80	56'65	56'49	56'38	56'00	55'88	55'68	55'43	55'26	55'05	56'07

VERTICAL FORCE.													
One Scale Division = $\cdot 000066$ parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ} 64$.													
Mean Göttingen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .	
NOVEMBER.	1	Sc. Div. 173 ⁹	Sc. Div. 173 ⁹	Sc. Div. 172 ⁶	Sc. Div. 166 ⁷	Sc. Div. 164 ⁸	Sc. Div. 167 ⁰	Sc. Div. 169 ⁸	Sc. Div. 169 ⁸	Sc. Div. 171 ⁸	Sc. Div. 171 ⁸	Sc. Div. 172 ⁷	Sc. Div. 181 ³
	2	171 ⁷	175 ⁰	175 ⁰	173 ³	171 ⁰	171 ²	170 ⁸	169 ⁸	166 ⁹	166 ⁵	165 ¹	165 ⁵
	3	164 ⁴	164 ⁹	161 ⁵	162 ⁶	162 ⁰	165 ⁷	166 ⁸	166 ⁸	170 ⁶	169 ³	167 ⁹	167 ⁹
	4	166 ⁶	170 ²	165 ⁰	167 ⁴	167 ¹	165 ⁵	166 ²	167 ⁹	169 ⁶	169 ⁴	166 ⁶	166 ³
	5	172 ⁷	173 ²	172 ²	171 ⁷	171 ⁷	171 ⁷	171 ⁷	172 ¹	173 ⁶	171 ⁶	172 ⁵	172 ⁷
	6	177 ⁷	180 ²	173 ⁷	176 ²	176 ²	176 ²	176 ²	175 ⁴	179 ²	178 ⁶	176 ⁹	177 ⁸
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	179 ⁹	179 ⁹	178 ¹	177 ⁴	177 ⁹	176 ⁵	178 ¹	179 ¹	179 ⁰	179 ¹	178 ¹	178 ⁷
	9	172 ⁶	171 ⁶	171 ⁵	171 ⁵	171 ²	170 ³	169 ⁵	170 ⁴	170 ⁴	170 ⁴	168 ⁷	169 ³
	10	173 ⁵	175 ⁶	175 ⁵	175 ³	177 ⁰	176 ⁴	178 ⁵	178 ⁵	180 ⁶	182 ²	183 ⁷	178 ⁵
	11	180 ²	180 ²	184 ⁰	182 ⁵	182 ⁰	182 ⁸	183 ⁷	183 ⁷	183 ⁷	183 ²	183 ²	183 ¹
	12	180 ⁸	184 ⁴	184 ⁴	179 ⁰	179 ⁰	181 ¹	181 ⁰	182 ²	182 ²	182 ¹	181 ³	180 ⁹
	13	180 ⁵	190 ⁵	180 ³	180 ³	180 ¹	188 ⁷	181 ⁶	180 ⁷	180 ⁷	179 ⁸	182 ²	180 ⁸
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	184 ⁸	184 ⁷	185 ⁰	183 ¹	180 ⁹	180 ⁴	181 ⁷	182 ⁶	182 ⁶	182 ⁹	182 ⁶	181 ⁷
	16	179 ⁸	181 ¹	181 ⁶	180 ⁹	183 ⁷	182 ⁷	182 ⁷	184 ⁴	185 ³	187 ⁷	184 ⁹	184 ⁹
	17	176 ⁵	176 ⁶	176 ⁸	176 ⁶	175 ⁷	174 ⁷	174 ⁵	174 ⁹	174 ⁹	174 ⁹	174 ⁷	174 ⁶
	18	172 ⁸	173 ⁷	173 ⁹	173 ⁹	172 ⁸	171 ⁹	171 ⁹	173 ³	173 ⁶	173 ⁶	175 ⁶	174 ⁸
	19	172 ⁷	172 ⁸	178 ⁹	178 ⁹	178 ⁹	180 ⁸	181 ⁵	183 ⁵	184 ⁴	188 ³	216 ⁶	194 ⁶
	20	188 ⁶	168 ⁸	181 ¹	184 ⁹	186 ⁰	187 ³	187 ³	188 ³	190 ⁵	185 ⁵	188 ⁵	189 ⁸
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	188 ⁴	187 ⁰	187 ⁰	187 ⁴	185 ⁵	185 ²	185 ⁴	180 ⁰	183 ⁷	180 ²	225 ⁴	224 ⁴
	23	185 ⁷	185 ⁴	185 ⁵	183 ⁷	183 ⁴	181 ⁵	181 ⁵	181 ⁶	181 ⁶	178 ³	178 ³	178 ²
	24	175 ⁶	175 ⁶	175 ⁷	175 ²	171 ⁴	173 ⁵	176 ¹	178 ¹	179 ⁴	179 ⁴	176 ⁹	175 ⁷
	25	174 ¹	174 ⁰	174 ⁰	172 ⁴	170 ⁶	172 ²	182 ¹	185 ³	189 ⁶	193 ³	204 ⁵	201 ⁷
	26	179 ²	177 ²	184 ⁵	185 ⁷	186 ⁴	187 ⁵	191 ⁰	189 ⁷	189 ⁷	191 ⁹	193 ⁴	192 ⁷
	27	186 ⁵	187 ¹	188 ⁰	188 ⁷	190 ⁴	193 ⁰	191 ³	190 ⁷	193 ⁹	193 ⁸	195 ⁰	19 ⁴
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	205 ²	205 ³	202 ⁴	205 ⁷	205 ²	205 ²	205 ³	204 ⁰	202 ⁹	201 ⁶	200 ⁵	200 ⁵
	30	203 ¹	203 ¹	196 ⁶	198 ¹	199 ³	199 ⁰	199 ⁰	199 ⁶	198 ⁸	197 ⁸	197 ⁸	197 ⁸
Hourly Means		178 ⁹⁷	179 ⁶⁷	179 ²⁵	178 ⁸⁹	178 ⁶¹	179 ¹⁸	179 ⁵⁹	179 ⁹⁰	180 ⁶⁷	180 ⁶²	181 ⁵³	180 ⁷³
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
NOVEMBER.	1	53 ⁶	53 ⁸	54 ⁰	54 ¹	54 ⁸	55 ²	55 ⁷	56 ²	56 ⁸	57 ²	57 ⁷	57 ⁸
	2	57 ²	57 ²	57 ²	57 ⁷	58 ⁷	59 ²	59 ³	59 ⁶	59 ⁸	60 ²	60 ⁵	60 ⁶
	3	59 ⁰	59 ⁰	59 ⁰	59 ⁰	59 ⁰	59 ²	59 ⁶	59 ⁸	59 ⁸	59 ⁹	59 ⁸	59 ⁸
	4	58 ⁴	58 ⁰	58 ⁰	58 ⁸	59 ⁰	59 ²	59 ³	59 ⁴	60 ⁰	59 ⁸	60 ⁰	60 ⁰
	5	56 ⁰	54 ⁴	55 ⁰	54 ⁵	54 ⁵	54 ⁶	55 ⁰	54 ⁷	54 ⁹	55 ²	55 ⁶	55 ³
	6	51 ⁵	52 ¹	59 ²	52 ²	52 ²	52 ⁴	52 ⁰	52 ³	52 ⁴	53 ²	53 ⁶	53 ⁴
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	49 ²	49 ⁴	49 ⁴	49 ⁷	50 ⁰	50 ⁵	51 ⁰	51 ⁴	52 ¹	52 ³	53 ¹	53 ⁵
	9	55 ⁵	55 ⁹	56 ⁰	56 ⁰	56 ¹	56 ⁷	57 ²	57 ⁴	58 ⁰	58 ⁵	59 ⁰	58 ⁵
	10	53 ⁸	53 ¹	53 ⁰	53 ⁰	53 ⁰	53 ⁰	53 ⁰	53 ⁰	52 ⁸	52 ⁵	52 ⁴	53 ⁰
	11	51 ²	50 ⁸	50 ⁶	50 ⁵	50 ²	50 ⁴	50 ⁸	51 ²	51 ²	51 ¹	51 ²	51 ²
	12	49 ⁸	49 ⁴	49 ⁶	50 ⁶	50 ⁵	50 ²	50 ⁷	51 ⁰	51 ²	51 ²	50 ⁹	51 ⁰
	13	49 ⁸	49 ⁹	50 ²	50 ⁰	50 ¹	50 ⁶	50 ⁸	51 ²	51 ²	51 ⁸	51 ⁷	51 ⁸
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	47 ⁵	47 ⁶	47 ⁸	48 ⁰	48 ⁴	49 ⁰	49 ²	49 ³	49 ⁴	49 ⁴	49 ⁴	49 ²
	16	47 ⁵	47 ⁴	47 ⁴	47 ⁸	48 ⁰	48 ²	48 ⁶	49 ⁴	49 ⁶	50 ²	50 ⁴	50 ⁴
	17	53 ⁰	53 ⁰	52 ⁹	52 ⁷	52 ⁷	53 ⁴	53 ⁸	54 ⁰	54 ⁵	54 ⁴	54 ⁶	55 ¹
	18	54 ³	54 ²	54 ¹	53 ³	53 ⁶	53 ⁹	54 ⁰	54 ⁰	53 ⁸	54 ²	54 ²	54 ⁴
	19	52 ⁷	52 ⁴	51 ²	50 ⁵	49 ⁸	49 ⁸	49 ²	49 ⁰	48 ⁸	48 ⁶	48 ⁴	49 ⁴
	20	43 ⁷	43 ⁶	44 ⁰	44 ²	44 ⁶	44 ⁹	46 ²	46 ⁰	46 ⁴	46 ⁶	47 ⁰	46 ⁴
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	46 ²	46 ⁴	46 ⁴	46 ⁶	47 ⁰	48 ⁰	49 ²	49 ⁷	50 ⁵	51 ²	51 ⁷	53 ⁸
	23	51 ⁸	51 ⁴	51 ⁰	50 ⁷	51 ⁰	51 ³	51 ⁶	52 ⁴	52 ⁷	53 ⁴	54 ⁰	54 ²
	24	55 ⁵	55 ³	55 ²	55 ²	55 ²	55 ⁵	55 ⁶	55 ⁹	56 ⁰	56 ²	56 ²	56 ⁴
	25	54 ²	54 ²	54 ²	54 ⁴	55 ¹	55 ¹	55 ¹	55 ⁰	54 ⁶	54 ⁴	54 ⁸	54 ⁴
	26	50 ¹	49 ³	48 ⁶	48 ⁴	47 ⁸	48 ²	48 ³	48 ²	47 ⁸	47 ⁴	47 ⁴	47 ⁸
	27	47 ⁴	47 ²	47 ⁰	46 ⁷	46 ⁰	46 ⁴	46 ⁷	46 ⁶	46 ⁸	47 ⁰	47 ²	46 ⁴
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	35 ⁸	35 ⁹	35 ⁹	35 ⁹	35 ⁴	36 ¹	36 ³	36 ⁸	37 ⁵	38 ¹	38 ⁶	38 ⁸
	30	37 ¹	37 ¹	38 ²	37 ⁶	38 ¹	38 ⁹	39 ¹	39 ⁶	40 ⁰	39 ⁸	40 ⁰	40 ⁶
Hourly Means		51 ²⁰	51 ⁰³	51 ³³	51 ⁰⁰	51 ⁰⁵	51 ³⁹	51 ⁶⁰	51 ⁸⁴	52 ⁰⁵	52 ²⁴	52 ⁴³	52 ⁵⁵

* Fifteen minutes late.

* Two minutes late.

ture, 1° 64.

10h.	11h.
Sc. Div. 172°7 165°1 167°9 166°6 172°5 176°9	Sc. Div. 181°3 165°5 167°9 166°3 172°7 177°8
178°1 168°7 183°7 183°2 181°3 182°2	178°7 169°3 178°5 183°1 180°9 180°8
182°6 184°9 174°7 175°6 216°6 188°5	181°7 184°9 174°6 174°8 194°6 189°8
225°4 178°3 176°9 204°5 193°4 195°0	224°4 178°2 175°7 201°7 192°7 19°4
200°5 197°8	200°5 197°8
181°53	180°73

VERTICAL FORCE.

One Scale Division = 0.00066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 189°5 166°2 166°1 166°2 172°9 177°6	Sc. Div. 211°2 166°0 166°2 173°6 177°6	Sc. Div. 194°4 166°4 166°0 173°6 178°2	Sc. Div. 164°6 167°4 163°1 166°3 173°2 178°3	Sc. Div. 166°3 167°4 163°3 166°9 173°2 178°3	Sc. Div. 175°7 165°1 164°5 167°6 173°2 178°8	Sc. Div. 177°8 163°5 164°5 167°9 174°4	Sc. Div. 171°4 164°0 149°5 170°3 174°3	Sc. Div. 164°2 164°3 153°1 171°2 175°8	Sc. Div. 169°9 164°3 160°8 171°2 175°8	Sc. Div. 169°9 156°5 162°4 171°2 165°3	Sc. Div. 169°7 156°3 166°6 171°7 174°8	Sc. Div. 174°20 167°05 164°01 167°95 172°76
178°1 168°7 183°7 183°2 181°3 182°2	178°7 169°3 178°5 183°1 180°9 180°8	175°9 175°8 181°6 183°1 180°2 182°9	175°8 173°6 181°8 182°9 179°4 181°2	175°8 173°6 179°1 182°5 176°1 180°9	173°9 173°3 179°1 180°7 173°6 180°9	178°9 165°2 173°6 174°5 182°1 173°6	183°3 170°3 173°7 172°3 182°1 173°5	178°9 170°3 173°8 177°7 182°2 177°2	181°2 171°7 176°0 179°4 182°7 177°2	179°3 171°5 175°9 179°4 181°8 179°5	179°9 171°7 174°8 179°8 180°0 179°5	178°11 175°54 172°58 178°37 182°44 179°53
182°6 184°9 174°7 175°6 216°6 188°5	181°7 184°9 174°6 174°8 194°6 189°8	184°2 184°5 175°6 173°7 190°5 192°3	184°2 183°4 174°7 173°7 193°4 191°2	184°5 183°3 174°3 173°2 199°2 191°4	184°7 181°4 172°6 173°2 191°0 191°4	184°7 180°5 172°8 171°4 191°0 188°5	184°4 182°7 178°8 172°8 191°0 187°8	182°3 177°8 172°8 173°6 191°0 188°4	182°3 176°1 172°8 172°0 191°0 188°4	182°3 176°1 171°8 175°3 191°0 188°4	182°8 176°6 171°3 172°8 191°0 188°4	183°01 182°01 174°30 173°39 188°34 187°76
225°4 178°3 176°9 204°5 193°4 195°0	224°4 178°2 175°7 201°7 192°7 19°4	189°8 189°0 181°8 175°1 223°3 193°1	209°7 177°0 177°9 175°1 223°3 193°1	142°9 176°4 165°9 161°5 186°7 192°9	135°0 176°4 173°8 178°8 188°1 193°0	171°5 176°4 181°8 177°7 188°8 188°6	181°3 176°1 177°8 176°8 185°8 185°4	181°2 177°4 182°4 178°6 185°4 185°3	177°4 176°4 182°4 179°9 185°4 195°2	179°7 175°6 178°6 179°9 185°3 190°7	179°7 175°6 178°7 179°2 185°8 194°6	184°28 179°46 176°43 184°57 187°89 195°38
200°5 197°8	200°5 197°8	202°1 196°4	202°6 196°4	202°2 196°4	203°0 197°4	204°7 196°4	204°7 197°5	204°7 195°3	204°3 195°2	206°4 190°7	205°8 194°6	203°04 197°43
181°53	180°73	182°41	179°56	179°13	179°28	179°66	178°80	178°45	179°51	178°55	179°27	179°76

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

57°7 60°5 59°8 60°0 55°6 53°6	57°8 60°6 59°8 60°0 55°3 53°4	58°2 60°2 59°8 60°0 55°1 53°2	58°2 60°1 59°8 59°4 54°8 53°0	58°2 60°0 59°8 59°0 54°8 52°4	58°5 60°0 60°0 58°9 54°7 52°0	58°8 59°8 59°9 58°0 54°4 51°7	58°8 59°6 59°7 57°3 54°0 48°4	58°0 59°5 61°0 57°1 53°8 48°4	57°4 59°2 60°0 56°8 53°6 48°4	57°3 59°2 59°3 56°5 53°0 48°5	57°2 59°2 59°0 56°2 52°2 49°0	57°0 59°2 59°0 56°2 52°2 49°0	56°77 59°34 59°63 58°65 54°56 51°77
53°1 59°0 52°4 51°2 50°9 51°7	53°5 58°5 53°0 51°2 51°0 51°8	53°7 57°2 52°5 51°0 51°0 51°4	54°2 57°2 52°1 50°9 50°8 50°3	54°2 57°0 52°1 50°6 51°4 50°2	54°1 57°0 52°1 50°6 51°4 50°2	54°1 56°5 52°1 52°2 52°0 49°8	54°1 54°9 52°2 52°2 50°7 47°3	54°1 54°7 52°2 52°2 50°4 47°8	54°2 54°2 52°0 50°1 50°4 47°8	54°2 53°8 51°7 50°2 49°6 47°5	54°2 53°8 51°5 50°2 49°6 47°5	54°2 53°8 51°5 50°2 49°6 47°5	54°2 53°8 51°5 50°2 49°6 47°5
49°4 50°4 54°6 54°2 48°4 47°0	49°2 50°4 55°1 54°4 49°4 46°4	48°7 50°8 55°7 54°7 48°4 45°4	48°5 51°2 55°7 55°6 47°5 45°4	48°2 51°4 55°5 54°8 46°6 45°2	48°0 51°5 55°4 54°8 46°2 45°1	48°0 52°0 55°3 54°5 45°7 45°1	47°8 52°5 55°2 54°5 45°4 45°0	47°8 52°3 55°2 54°5 45°1 44°9	47°8 52°6 55°2 54°6 44°4 44°2	47°5 52°8 55°0 53°6 44°2 44°2	47°5 52°9 51°7 50°2 49°6 47°5	47°5 52°9 51°7 50°2 49°6 47°5	47°5 52°9 51°7 50°2 49°6 47°5
51°7 54°0 56°2 54°8 47°4 47°2	53°8 54°2 56°4 54°4 47°8 46°4	54°5 54°7 56°3 55°7 47°8 45°4	54°2 55°0 56°3 55°2 47°9 45°5	54°8 55°2 55°9 55°0 47°8 45°4	55°0 55°4 55°7 54°4 48°2 45°0	55°0 55°4 55°5 54°2 47°7 36°1	55°0 55°3 55°2 54°0 47°4 36°0	55°0 55°3 55°2 53°7 46°7 35°4	55°0 55°2 54°6 53°7 46°7 35°3	55°0 55°3 54°6 51°6 46°9 35°5	55°0 55°3 54°2 51°6 46°8 35°5	55°0 55°3 54°0 50°5 46°8 35°6	55°0 55°3 54°0 50°5 46°8 35°6
38°6 40°0	38°8 40°6	38°1 41°2	38°6 41°2	38°6 40°8	38°3 40°6	38°3 40°6	38°3 39°7	38°3 39°6	38°1 40°6	37°9 40°4	37°2 40°3	37°47 59°72	37°47 59°72
52°43	52°53	52°42	52°33	52°22	52°16	52°10	51°34	51°04	50°95	50°74	50°58	50°51	51°61

* Omitted in the Means, on account of disturbance.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
DECEMBER.	1	195'7	195'7	195'7	196'8	195'2	193'2	193'2	193'2	191'5	189'5	187'8
	2	185'9	184'8	186'7	184'3	184'3	184'3	182'7	185'8	185'8	187'5	192'9
	3	184'5	184'5	186'8	185'8	185'1	185'1	185'1	187'0	188'7	189'7	189'7
	4	189'2	189'2	186'2	189'1	189'1	190'4	190'4	192'5	192'5	192'5	192'7
	5	—	—	—	—	—	—	—	—	—	—	—
	6	194'6	194'6	194'6	194'6	191'6	191'6	190'6	190'6	190'2	189'4	187'7
	7	190'6	190'6	189'9	189'7	189'4	188'7	188'2	186'0	184'5	183'3	182'4
	8	174'5	179'1	182'2	183'3	183'3	184'7	183'7	183'7	184'4	183'9	182'2
	9	176'6	176'6	178'5	178'5	179'6	180'1	180'4	181'3	183'0	181'9	179'8
	10	171'2	171'0	172'4	173'2	172'8	172'8	171'8	172'1	170'3	176'7	178'9
	11	167'9	169'0	169'2	171'8	170'7	173'6	175'5	176'5	180'3	179'4	180'2
	12	—	—	—	—	—	—	—	—	—	—	—
	13	182'3	182'3	181'4	181'3	179'9	180'4	181'3	181'2	181'6	181'0	180'9
	14	180'8	181'9	184'1	184'4	183'5	183'5	182'5	182'5	182'5	184'5	183'8
	15	183'1	182'4	182'5	183'5	181'7	180'7	181'8	183'1	183'6	183'8	183'4
	16	191'1	189'7	191'6	192'8	193'1	191'4	191'4	191'4	191'4	191'4	191'9
	17	183'7	181'5	193'0	188'7	190'7	186'5	194'9	207'9	216'2	203'1	206'4
	18 ^b	196'5	194'9	194'5	195'4	197'1	196'2	197'1	197'7	200'1	201'6	197'6
	19	—	—	—	—	—	—	—	—	—	—	—
	20 ^b	85'0	76'3	160'9	156'4	209'7	231'0	231'5	221'3	246'1	237'8	239'1
	21	214'1	213'5	212'0	211'6	211'8	211'8	212'3	212'2	210'8	209'6	209'6
	22	203'9	204'1	203'0	200'7	201'5	202'7	201'7	203'5	203'0	201'4	201'7
	23	192'9	193'3	194'4	198'6	198'3	198'4	197'5	200'5	202'8	203'4	203'7
	24	197'9	197'9	201'1	200'5	198'4	198'3	198'3	199'1	200'7	199'3	199'0
	25 ^d	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	206'1	206'1	206'0	203'0	204'0	203'0	203'1	204'3	205'6	205'6	205'2
	28	198'1	196'4	196'4	196'7	195'0	194'8	193'7	193'7	195'0	192'7	192'7
	29	185'8	185'8	185'8	183'7	178'0	181'3	181'3	181'3	196'0	185'8	182'8
	30	180'6	180'0	179'6	178'6	176'5	175'4	176'2	177'4	178'0	176'9	174'5
	31	173'8	172'4	173'9	173'7	172'4	172'4	173'2	173'2	174'8	173'5	172'6
Hourly Means		187'71	187'60	188'62	188'66	187'75	187'71	187'95	189'17	190'55	189'41	188'42
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
DECEMBER.	1	40'4	40'2	40'4	40'9	41'5	42'2	42'6	42'7	43'2	44'0	44'2
	2	46'8	47'0	46'5	46'4	46'4	46'4	46'8	47'4	47'6	48'2	48'1
	3	47'3	47'2	46'4	46'4	46'4	46'5	46'6	46'5	46'4	46'3	46'2
	4	45'0	44'6	44'3	44'3	43'9	44'3	44'3	44'2	44'1	44'4	44'6
	5	—	—	—	—	—	—	—	—	—	—	—
	6	41'5	41'7	41'4	41'4	42'2	42'9	44'1	44'4	44'5	44'6	44'6
	7	43'4	43'7	43'5	44'3	44'5	45'0	45'3	46'0	46'4	47'6	48'2
	8	47'0	46'9	46'6	46'7	47'2	47'7	48'0	48'4	48'6	49'2	49'4
	9	51'1	51'4	50'6	50'3	50'2	50'3	50'4	50'4	50'0	50'2	50'4
	10	53'8	54'1	53'6	53'6	53'5	54'2	54'4	54'8	54'7	55'0	55'0
	11	52'0	51'5	51'5	51'7	51'3	51'6	51'8	52'1	51'9	52'0	52'0
	12	—	—	—	—	—	—	—	—	—	—	—
	13	48'4	48'5	48'4	48'3	48'3	48'5	48'6	48'7	48'7	49'4	49'2
	14	47'6	47'4	46'9	46'6	46'8	47'4	47'6	47'8	48'0	48'0	47'5
	15	47'6	47'4	47'2	47'2	47'4	47'8	48'0	47'7	47'4	47'5	47'6
	16	42'2	42'4	42'3	40'8	40'0	39'8	39'8	40'1	40'3	40'5	41'2
	17	39'8	39'8	39'1	39'0	39'0	39'0	39'3	39'5	40'2	40'2	42'0
	18 ^b	40'2	40'0	39'8	39'6	39'6	39'8	40'3	40'8	41'2	41'7	42'2
	19	—	—	—	—	—	—	—	—	—	—	—
	20 ^b	42'2	42'2	41'2	40'6	40'0	39'4	39'3	39'8	40'0	39'8	39'7
	21	35'4	36'1	35'9	35'7	36'0	36'3	36'3	36'8	37'0	37'3	37'3
	22	38'8	38'7	38'8	38'5	38'9	39'1	40'0	40'0	40'4	40'9	41'6
	23	42'4	42'6	41'7	40'9	40'4	40'4	40'4	40'0	39'7	40'3	41'0
	24	40'0	39'8	39'8	40'0	40'1	40'2	40'1	40'3	40'3	40'6	41'0
	25 ^d	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	33'1	33'5	33'6	33'4	33'4	33'8	34'0	34'1	34'2	34'3	34'2
	28	38'0	38'1	38'3	38'8	39'1	39'3	39'6	40'0	40'4	41'0	41'4
	29	44'5	44'5	44'4	44'9	45'9	46'5	47'2	47'6	47'9	48'4	48'5
	30	49'4	49'4	50'0	50'0	50'1	50'9	50'8	51'0	51'2	51'2	51'3
	31	52'4	52'4	53'0	53'0	52'8	52'7	52'5	52'5	52'5	53'0	53'2
Hourly Means		44'50	44'54	44'34	44'30	44'39	44'70	44'94	45'12	45'23	45'56	45'80

* Two minutes late.

* Omitted in the Means, on account of disturbance.

VERTICAL FORCE.														
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.														
Mean Götting- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.		
JANUARY.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Sc. Div. 169'8 — 183'5 176'7 190'8 192'3 198'4 194'1 — 209'8 207'3 189'6 190'2 177'9 177'2 — 186'5 188'8 198'7 186'9 179'8 186'4 — 183'2 186'8 174'0 173'4 175'4 174'1 — 187'2	Sc. Div. 169'8 — 182'8 181'5 190'8 194'2 198'2 193'8 — 212'1 207'3 193'1 188'3 179'8 177'2 — 186'5 188'8 198'7 186'7 180'3 186'5 — 181'5 187'5 174'3 172'7 175'4 175'0 — 187'2	Sc. Div. 170'9 — 174'7 182'9 191'6 196'4 197'2 195'6 — 212'1 210'0 196'4 186'9 180'9 177'2 — 189'7 189'8 198'7 186'2 181'3 189'1 — 184'6 186'8 175'0 175'3 175'5 184'8 — 186'9	Sc. Div. 171'1 — 181'1 185'3 191'5 195'1 195'0 192'6 — 210'4 209'1 189'6 186'2 181'1 177'2 — 185'9 187'6 197'6 186'3 178'0 188'6 — 186'2 185'3 175'0 175'1 177'3 179'4 — 187'1	Sc. Div. 168'8 — 178'2 184'5 190'3 195'1 195'0 190'9 — 207'0 210'0 190'7 188'8 180'9 174'7 — 186'9 188'7 197'6 186'3 178'0 188'4 — 184'6 182'8 178'6 174'4 175'3 181'2 — 184'4	Sc. Div. 168'8 — 179'4 181'7 190'3 194'2 198'0 191'4 — 209'4 209'1 193'6 189'2 180'8 175'9 — 188'3 188'8 195'9 185'9 178'0 187'5 — 186'4 182'8 178'1 175'2 176'4 184'2 — 183'5	Sc. Div. 169'7 — 181'9 183'0 192'5 195'6 198'4 190'3 — 209'4 209'1 201'3 188'7 180'8 175'9 — 190'0 193'9 197'9 186'6 177'3 187'9 — 187'7 183'0 179'4 175'2 177'4 186'7 — 185'4	Sc. Div. 170'4 — 182'4 184'0 190'5 195'6 198'4 190'3 — 209'3 203'3 196'9 193'1 183'6 175'2 — 189'2 192'6 196'8 185'5 178'5 188'8 — 190'0 184'2 181'8 174'5 177'4 185'7 — 185'4	Sc. Div. 170'4 — 182'7 186'3 187'9 195'3 197'7 189'4 — 209'3 203'3 203'2 208'7 183'6 174'8 — 189'2 192'6 196'8 184'5 178'5 188'8 — 190'0 184'2 181'8 173'8 176'6 184'6 — 184'5	Sc. Div. 170'4 — 184'5 186'0 186'7 194'6 196'9 188'8 — 209'3 202'9 199'2 208'7 184'8 172'2 — 188'2 191'4 196'0 181'5 180'0 188'8 — 190'8 183'9 181'8 173'8 176'6 182'5 — 182'4	Sc. Div. 170'4 — 185'6 186'0 185'0 194'6 197'7 188'8 — 209'3 202'8 197'8 206'1 184'8 172'2 — 185'3 192'3 196'2 181'5 179'8 187'7 — 189'4 183'9 181'8 173'6 178'1 182'5 — 179'7		
	Hourly Means	186'11	186'54	187'53	186'73	186'13	186'40	187'64	187'57	187'90	188'11	187'58	187'10	
	TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
	JANUARY.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	54'4 — 45'8 47'6 42'2 39'9 36'9 39'9 — 28'1 25'6 35'0 41'6 47'4 49'6 — 43'8 43'1 36'2 42'9 46'7 42'4 — 37'9 43'4 49'4 50'2 48'0 47'4 — 43'4	55'0 — 46'0 47'3 42'0 39'5 37'1 39'5 — 27'2 25'7 34'7 42'3 47'4 49'7 — 43'8 42'9 36'1 42'9 46'5 42'6 — 38'1 43'6 49'5 50'0 48'0 47'4 — 43'5	54'2 — 46'5 46'5 42'0 39'0 37'1 39'8 — 27'1 27'0 36'0 42'0 47'4 49'7 — 44'4 42'6 36'1 42'6 46'5 41'9 — 38'3 43'5 48'8 50'2 48'0 46'7 — 43'5	54'3 — 46'4 46'5 41'7 39'0 37'2 40'0 — 26'9 27'0 35'4 42'3 47'2 50'0 — 43'9 41'6 37'8 42'4 47'2 41'6 — 38'0 43'8 48'3 50'2 48'4 46'4 — 43'7	54'2 — 46'4 47'0 41'6 39'4 37'1 40'0 — 26'3 27'1 36'1 42'6 47'4 49'8 — 43'9 41'5 38'3 42'4 47'8 41'4 — 40'0 44'3 47'7 49'8 48'8 46'6 — 44'6	54'6 — 46'2 46'4 42'1 39'7 37'3 40'6 — 27'2 27'3 37'1 42'6 47'6 50'2 — 43'7 41'5 38'3 42'6 47'8 41'7 — 40'6 45'0 48'3 50'9 49'5 46'6 — 44'6	54'6 — 46'4 46'5 42'7 39'6 38'1 41'5 — 27'7 28'0 38'0 43'0 47'8 50'5 — 43'7 40'9 38'5 44'8 48'7 42'1 — 40'6 45'7 48'5 51'2 49'7 47'2 — 44'7	54'6 — 46'3 46'4 42'7 39'6 38'1 41'5 — 28'2 29'2 38'8 43'4 48'0 50'9 — 43'5 40'9 38'8 44'8 48'9 42'2 — 40'6 45'7 48'4 51'2 49'5 47'3 — 45'2	54'5 — 46'3 46'4 43'7 39'6 38'1 41'5 — 28'3 30'0 39'3 43'4 47'7 50'9 — 43'5 40'9 38'8 44'8 48'9 42'3 — 40'6 45'7 48'5 51'7 49'5 47'2 — 46'0	54'5 — 46'3 46'4 44'4 39'5 38'1 41'5 — 28'7 31'0 39'5 43'6 48'4 51'4 — 44'0 41'1 38'8 44'8 48'9 42'3 — 40'6 45'7 48'5 51'7 49'5 47'2 — 46'0	54'3 — 46'7 46'4 45'6 39'5 38'1 41'5 — 29'0 31'7 40'0 44'2 48'4 52'1 — 44'4 41'4 39'1 42'2 49'2 43'0 — 43'3 47'4 49'2 51'8 49'2 47'4 — 47'2	54'4 — 47'2 46'0 45'7 39'8 37'3 43'4 — 29'2 32'0 40'0 44'5 49'0 52'2 — 45'0 40'4 39'1 47'3 48'4 52'2 — 43'3 47'4 49'2 51'8 49'2 47'5 — 47'2
		Hourly Means	42'65	42'65	42'62	42'61	42'66	43'08	43'35	43'60	43'77	44'15	44'55	44'61

ature, 1° 64.

10h.	11h.
Sc. Div. 170° 4	Sc. Div. 170° 4
185° 6	184° 3
186° 0	185° 8
185° 0	184° 9
194° 6	194° 6
197° 7	199° 5
188° 8	187° 8
209° 3	208° 3
202° 9	202° 8
197° 8	197° 8
206° 1	200° 2
184° 8	184° 2
172° 2	172° 2
188° 2	185° 3
193° 2	192° 3
196° 2	198° 6
181° 5	182° 5
179° 8	181° 1
187° 7	186° 5
189° 4	189° 6
183° 9	182° 9
181° 8	179° 2
173° 8	173° 6
178° 1	178° 1
182° 5	182° 5
179° 7	179° 7
187° 58	187° 10

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 170° 5	Sc. Div. 170° 7	Sc. Div. 170° 9	Sc. Div. 173° 3	Sc. Div. 171° 7	Sc. Div. 171° 5	Sc. Div. —	Sc. Div. —	Sc. Div. —	Sc. Div. —	Sc. Div. —	Sc. Div. —	Sc. Div. —
184° 3	183° 8	184° 9	189° 8	187° 8	186° 3	183° 4	183° 4	182° 8	182° 8	182° 8	183° 5	173° 68
185° 8	187° 8	187° 2	186° 9	186° 8	187° 8	182° 9	179° 5	169° 9	167° 7	170° 4	169° 3	180° 95
184° 9	187° 4	187° 4	188° 9	191° 3	191° 3	188° 6	189° 8	189° 8	189° 8	189° 5	189° 5	185° 96
194° 7	195° 5	195° 7	195° 7	196° 1	195° 7	195° 7	196° 2	198° 4	198° 4	199° 3	197° 7	189° 72
199° 5	198° 9	198° 9	199° 5	199° 3	199° 3	197° 3	195° 5	196° 1	195° 5	192° 1	192° 8	197° 26
188° 0	187° 6	188° 2	188° 1	188° 2	188° 2	—	—	—	—	—	—	194° 37
207° 3	207° 3	208° 7	208° 7	208° 3	206° 6	207° 4	207° 6	207° 8	209° 3	204° 9	205° 2	209° 42
201° 6	200° 9	210° 5	217° 2	227° 2	209° 4	203° 5	203° 5	178° 4	177° 0	179° 6	188° 8	203° 24
197° 5	194° 8	194° 8	194° 7	195° 1	195° 1	195° 2	189° 5	189° 0	185° 1	185° 0	189° 4	193° 93
200° 2	189° 3	189° 2	184° 4	183° 4	184° 0	182° 7	182° 0	181° 5	180° 5	180° 3	180° 2	188° 85
189° 1	188° 3	183° 2	179° 0	175° 9	175° 6	175° 6	177° 2	176° 6	176° 8	173° 1	176° 2	180° 29
172° 2	173° 0	173° 0	172° 8	173° 1	173° 6	—	—	—	—	—	—	177° 18
184° 0	186° 8	185° 8	186° 2	187° 7	187° 7	185° 4	185° 4	183° 9	183° 6	186° 2	186° 2	187° 73
193° 5	195° 7	195° 7	195° 8	195° 8	195° 7	188° 0	188° 4	188° 3	188° 3	188° 3	189° 6	189° 70
194° 0	194° 2	194° 1	195° 1	194° 0	194° 2	192° 3	189° 1	182° 3	180° 8	183° 3	185° 0	193° 49
182° 6	180° 8	180° 8	180° 8	179° 8	179° 8	175° 6	177° 2	177° 6	178° 0	179° 2	179° 8	182° 26
182° 5	184° 3	182° 9	182° 3	183° 0	184° 3	184° 7	186° 3	186° 3	186° 3	186° 3	186° 2	181° 90
187° 3	188° 9	189° 9	191° 3	190° 5	191° 7	—	—	—	—	—	—	190° 10
192° 7	192° 1	191° 2	190° 8	190° 8	190° 8	197° 5	197° 7	197° 7	193° 9	193° 9	188° 2	188° 57
182° 9	182° 6	183° 8	178° 5	178° 5	178° 5	190° 6	188° 8	188° 7	188° 7	188° 7	187° 8	181° 57
178° 7	179° 2	180° 8	180° 2	178° 4	177° 4	177° 9	177° 1	177° 1	175° 6	175° 6	174° 3	177° 59
173° 5	173° 0	173° 0	173° 0	173° 0	165° 8	164° 5	170° 6	173° 0	162° 4	175° 1	176° 2	172° 66
197° 2	211° 3	219° 2	187° 8	189° 8	172° 5	183° 6	186° 6	167° 1	169° 9	169° 3	154° 0	180° 27
182° 5	182° 3	182° 3	182° 3	182° 5	182° 6	—	—	—	—	—	—	183° 14
179° 7	179° 5	179° 5	183° 1	184° 0	184° 0	186° 4	186° 8	181° 9	188° 9	188° 5	185° 8	183° 69
187° 95	188° 50	188° 91	187° 93	188° 15	186° 52	188° 24	188° 48	185° 96	185° 41	185° 82	185° 61	187° 20

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

54° 3	54° 4
46° 7	47° 2
46° 4	46° 0
45° 6	45° 7
39° 5	39° 8
38° 1	37° 3
43° 0	43° 4
29° 0	29° 2
31° 7	32° 0
40° 0	40° 0
44° 2	44° 5
48° 4	49° 0
52° 1	52° 2
44° 4	45° 0
41° 4	40° 4
39° 1	39° 1
47° 2	47° 3
49° 2	48° 4
43° 0	43° 3
43° 0	43° 3
47° 3	47° 4
49° 2	49° 2
51° 7	51° 8
49° 5	49° 2
47° 4	47° 5
46° 9	47° 2
44° 55	44° 61

54° 2	54° 0	54° 0	53° 8	53° 7	53° 6	—	—	—	—	—	—	—	52° 25
47° 4	47° 9	47° 4	47° 8	47° 8	48° 0	46° 0	46° 0	46° 0	46° 2	46° 4	46° 4	—	47° 19
45° 3	45° 0	44° 6	44° 6	44° 2	44° 2	43° 3	42° 6	42° 1	42° 1	42° 2	42° 3	—	45° 07
45° 0	44° 4	43° 2	42° 4	41° 5	41° 1	41° 0	40° 5	40° 5	40° 4	40° 4	40° 0	—	42° 36
39° 5	39° 0	38° 2	38° 0	37° 8	37° 8	37° 6	37° 1	36° 4	36° 0	36° 2	36° 6	—	38° 49
37° 2	38° 0	37° 8	38° 1	37° 0	37° 1	37° 3	38° 1	39° 0	39° 2	39° 7	39° 8	—	37° 85
43° 6	43° 8	43° 9	44° 0	43° 6	43° 4	—	—	—	—	—	—	—	38° 80
29° 3	29° 8	29° 6	29° 2	29° 2	29° 4	30° 3	29° 8	29° 3	29° 0	29° 0	28° 8	—	27° 94
32° 8	33° 5	34° 3	34° 5	34° 8	34° 9	34° 6	34° 4	34° 7	34° 7	35° 0	35° 1	—	31° 46
40° 4	40° 0	40° 0	39° 7	39° 5	39° 1	38° 9	39° 1	39° 9	40° 0	40° 2	41° 2	—	38° 66
44° 7	44° 9	45° 0	45° 4	45° 7	45° 7	45° 5	46° 4	46° 5	47° 3	47° 3	47° 4	—	44° 45
49° 4	49° 2	49° 2	49° 5	50° 0	50° 1	50° 2	50° 0	50° 2	50° 3	50° 0	49° 6	—	48° 81
52° 3	52° 1	52° 1	51° 8	51° 4	51° 0	—	—	—	—	—	—	—	49° 26
45° 0	43° 8	44° 2	44° 3	44° 2	43° 8	44° 5	44° 4	44° 2	44° 2	44° 2	44° 4	—	43° 77
40° 0	39° 8	39° 3	38° 8	38° 4	37° 9	37° 6	37° 0	37° 0	36° 9	36° 7	36° 6	—	39° 83
39° 5	40° 0	40° 1	39° 9	40° 4	39° 6	40° 2	40° 6	41° 4	41° 5	41° 5	42° 3	—	39° 22
47° 3	47° 4	47° 4	47° 6	48° 1	47° 8	47° 6	47° 6	47° 6	47° 8	47° 6	47° 3	—	46° 13
48° 4	47° 6	47° 2	46° 7	46° 0	45° 6	44° 7	44° 2	43° 7	43° 6	43° 5	43° 0	—	46° 63
43° 5	43° 4	43° 0	42° 7	42° 4	41° 8	—	—	—	—	—	—	—	41° 12
43° 3	43° 3	42° 6	42° 6	42° 4	42° 6	37° 3	37° 1	37° 0	37° 4	37° 4	37° 5	—	41° 40
47° 6	47° 6	47° 4	47° 8	47° 8	47° 7	48° 3	48° 4	48° 5	49° 0	49° 3	49° 3	—	46° 70
49° 7	49° 6	49° 8	50° 4	50° 4	50° 6	50° 8	51° 0	50° 8	50° 8	50° 6	50° 3	—	49° 55
52° 2	52° 1	52° 0	51° 4	51° 2	50° 8	50° 4	50° 2	50° 0	49° 6	49° 5	49° 2	—	50° 72
49° 2	49° 2	49° 4	50° 6	51° 2	47° 5	49° 4	49° 0	49° 0	48° 2	47° 4	47° 4	—	48° 97
47° 3	47° 0	46° 8	46° 8	46° 6	46° 2	—	—	—	—	—	—	—	45° 71
47° 2	47° 0	46° 7	46° 7	45° 3	44° 5	44° 3	44° 2	44° 2	44° 0	44° 0	43° 7	—	44° 95
44° 67	44° 59	44° 43	44° 43	44° 25	43° 92	42° 49	42° 37	42° 26	42° 27	42° 25	42° 35	—	43° 36

VERTICAL FORCE.												
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Gettin- gen Time.	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	10 ^h .	11 ^h .
FEBRUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	187'3	186'0	187'4	186'9	186'7	185'8	187'4	187'4	187'4	184'4	184'4	184'4
2	184'3	184'3	183'0	178'0	182'7	183'4	183'6	183'4	182'9	180'5	179'0	178'0
3	178'9	178'9	179'2	179'2	177'6	177'0	177'0	176'9	176'9	175'7	174'1	173'1
4	178'0	178'2	181'0	180'3	178'1	177'8 ^a	177'8	177'3	177'5	178'2	176'9	176'9
5	179'5	179'5	179'4	178'6	178'3	176'1	177'7	177'7	179'4	178'8	180'4	180'9
6	—	—	—	—	—	—	—	—	—	—	—	—
7	193'1	192'8	194'7	193'5	192'3	191'0	192'7	193'9	193'6	194'0	191'2	194'7
8	192'9	193'6	193'6	195'3	191'1	190'6	195'3	194'4	194'0	193'7	187'7	187'8
9	178'4	189'2	189'2	185'3	186'0	186'1	189'2	189'2	193'6	197'5	192'2	195'4
10	187'5	191'1	191'9	189'3	186'2	187'9	190'7	193'5	194'1	194'8	194'3	194'3
11	199'3	202'5	201'5	200'5	197'0	196'8	198'7	198'9	199'7	198'9	196'7	196'7
12	198'2	198'2	198'7	196'3	194'9	192'7	194'4	192'3	191'4	191'1	189'6	189'4
13	—	—	—	—	—	—	—	—	—	—	—	—
14	191'7	194'3	198'7	181'1	182'6	182'9	183'1	183'3	181'8	181'8	184'8	187'1
15	183'7	183'9	188'6	180'0	180'9	181'9	185'1	185'5	185'5	185'5	182'2	180'9
16	185'2	187'1	185'9	178'6	175'3	175'3	176'5	177'5	178'1	178'1	176'7	176'7
17	182'4	182'3	182'1	179'4	177'3	175'9	176'4	177'8	177'8	177'1	174'6	174'9
18	178'7	180'0	178'9	178'1	176'0	175'3	173'4	173'4	173'3	173'1	170'5	171'7
19	173'3	178'0	179'5	176'5	176'5	176'3	173'3	175'3	175'2	173'8	172'2	173'4
20	—	—	—	—	—	—	—	—	—	—	—	—
21 ^b	147'8	100'4	161'0	193'4	190'1	185'0	192'0	194'3	193'9	180'0	250'2	243'7
22 ^b	172'5	170'5	179'1	179'8	179'8	179'8	179'8	184'4	176'3	185'7	184'2	182'5
23	171'3	177'9	177'2	172'6	172'8	174'9	174'7	181'1	182'4	180'8	182'6	181'8
24	129'9	127'9	156'9	175'7	180'0	186'3	184'8	183'9	188'9	192'6	199'0	192'6
25	178'4	173'9	183'3	189'4	188'5	188'5	188'5	189'5	191'5	188'9	190'7	189'7
26	184'5	183'5	186'1	181'8	177'9	180'6	181'5	180'9	183'4	180'9	180'2	178'9
27	—	—	—	—	—	—	—	—	—	—	—	—
28	181'2	179'8	181'7	181'7	184'1	184'1	181'2	183'1	180'4	180'6	181'4	180'4
29	179'8	182'6	182'6	182'0	180'2	178'6	178'6	180'1	180'9	181'7	182'6	182'9
Hourly Means	181'76	182'85	185'27	183'48	182'74	182'86	183'55	184'19	184'86	184'46	183'65	183'65
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
FEBRUARY.	°	°	°	°	°	°	°	°	°	°	°	°
1	43'4	43'6	43'0	42'4	42'4	42'4	42'6	42'6	42'5	43'2	43'4	43'5
2	41'6	41'6	42'0	44'0	43'2	43'4	43'5	44'3	44'8	45'9	46'6	47'4
3	46'4	45'9	46'3	46'4	47'3	47'6	47'9	48'4	48'6	49'3	49'7	50'2
4	45'4	45'2	45'2	45'3	46'3	46'8	47'0	47'2	47'2	47'5	47'7	48'2
5	46'5	46'6	46'3	46'0	46'2	46'6	46'6	46'4	45'7	45'6	45'4	45'2
6	—	—	—	—	—	—	—	—	—	—	—	—
7	39'0	39'0	38'8	38'2	38'1	38'2	38'2	38'6	39'1	39'6	40'2	41'4
8	39'9	39'5	39'3	38'2	38'8	39'3	40'0	40'3	40'6	41'3	42'0	42'2
9	41'3	41'3	43'0	42'4	42'4	42'3	42'0	42'0	42'3	42'4	43'0	43'0
10	40'8	40'6	40'1	41'0	40'0	39'8	39'8	39'8	39'8	39'9	39'9	39'9
11	33'1	32'8	33'3	34'9	34'3	34'6	34'6	34'4	35'1	36'0	36'8	37'4
12	36'1	35'6	35'2	35'5	36'2	37'0	37'0	37'8	38'3	39'4	40'0	40'6
13	—	—	—	—	—	—	—	—	—	—	—	—
14	38'8	38'4	38'8	42'4	41'0	41'3	41'4	42'4	43'0	43'4	43'9	44'0
15	43'2	42'5	42'3	42'6	42'7	42'9	42'4	42'8	43'5	44'5	45'7	46'5
16	42'7	42'4	42'9	45'4	45'6	46'2	46'5	46'8	47'4	47'8	48'2	48'3
17	44'2	43'5	44'0	44'5	45'5	46'4	46'7	46'6	47'1	47'9	48'6	49'4
18	45'8	45'8	45'7	46'4	46'6	47'4	47'5	48'2	49'2	49'6	50'0	50'2
19	46'2	45'6	45'5	46'2	45'8	46'3	47'0	47'9	48'3	48'8	49'2	49'3
20	—	—	—	—	—	—	—	—	—	—	—	—
21 ^b	45'3	45'4	46'0	47'0	47'0	47'4	47'7	48'1	48'5	49'0	49'5	50'6
22 ^b	50'2	50'0	49'5	49'4	49'3	49'4	49'6	49'9	49'9	50'0	50'2	50'4
23	49'4	49'0	49'0	49'4	49'5	49'5	49'3	48'8	48'4	48'7	48'8	48'8
24	46'2	46'2	44'9	44'7	44'1	44'3	44'4	45'0	44'4	45'5	45'8	46'1
25	43'2	41'5	41'3	42'0	42'0	42'3	42'4	42'8	42'8	43'3	43'8	44'3
26	46'4	44'3	44'0	46'3	46'2	46'5	46'3	46'4	46'4	47'1	47'4	47'4
27	—	—	—	—	—	—	—	—	—	—	—	—
28	43'0	42'5	42'1	42'0	42'0	42'5	43'6	44'5	45'2	45'5	46'0	46'2
29	45'2	44'6	44'3	44'4	44'6	45'0	45'3	45'2	44'6	44'6	44'4	44'0
Hourly Means	42'95	42'52	42'49	43'07	43'08	43'42	43'57	43'88	44'10	44'64	45'07	45'37

^a Three minutes late.^b Omitted in the Means, on account of disturbance.

VERTICAL FORCE.

One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
184'4	184'4	184'9	184'6	185'1	184'7	184'7	184'7	183'4	183'9	184'2	184'4	181'5	184'3	185'25
179'0	178'0	176'9	178'0	178'0	178'5	179'1	179'0	180'1	180'0	180'0	178'9	178'9	178'9	180'39
174'1	173'1	172'8	172'8	174'6	174'6	178'2	178'2	177'4	177'7	177'9	177'9	178'2	179'0	176'82
176'9	176'9	176'9	175'5	175'5	175'5	176'9	176'9	176'7	178'7	179'7	179'8	178'8	179'5	177'85
180'4	180'9	180'9	180'9	184'2	184'2	184'3	184'3	180'1	180'1	172'6	172'3	182'5	193'5	180'12
191'2	194'7	195'3	195'7	196'2	198'8	198'8	195'5	190'8	191'2	192'6	193'0	192'6	189'2	193'72
187'7	187'8	190'9	192'6	195'5	192'2	194'6	190'9	178'3	185'9	179'7	177'3	176'3	177'8	189'25
192'2	195'4	190'3	190'6	192'1	187'7	186'9	189'2	187'7	187'9	187'2	187'2	187'5	187'5	188'88
194'3	194'3	194'3	195'0	196'6	196'6	196'8	196'8	197'3	197'3	197'3	197'3	201'5	203'5	191'39
196'7	196'7	196'7	196'4	196'4	197'4	197'4	197'4	197'3	196'9	197'3	198'0	198'0	198'0	198'09
189'6	189'4	189'6	189'4	187'4	188'7	188'0	186'9	196'8	195'6	195'0	194'6	192'3	191'7	192'53
184'8	187'1	182'0	182'0	180'0	181'5	185'8	181'2	181'6	177'6	171'1	180'6	183'0	182'7	183'55
182'2	180'9	180'9	181'8	183'4	183'7	184'5	185'3	186'2	186'1	184'1	184'3	184'1	183'0	183'80
176'7	176'7	176'7	176'7	177'8	178'0	178'0	181'4	181'6	176'5	177'5	179'4	181'5	182'4	179'10
174'6	174'9	175'9	175'9	176'1	173'5	173'5	174'5	174'8	174'8	175'9	177'2	177'9	177'7	176'99
170'5	171'7	172'7	172'0	172'0	173'6	173'2	173'7	175'3	174'7	177'2	172'8	172'8	172'8	174'38
172'2	173'4	173'4	174'8	176'1	178'1	179'4	179'8	190'1	189'8	166'4	168'3	148'4	156'6	174'35
250'2	243'7	194'2	197'6	224'3	141'8	210'0	179'2	193'6	163'8	176'8	178'8	179'3	167'5	184'95
184'2	182'5	185'3	184'1	184'7	184'1	184'3	172'8	181'2	135'2	143'9	148'7	152'4	163'0	174'05
182'6	181'8	181'8	185'8	169'7	182'6	170'1	168'7	159'5	140'9	124'9	150'0	117'5	123'0	168'23
199'0	192'6	188'2	190'9	193'3	186'1	161'0	163'8	159'9	151'9	149'1	137'2	139'2	164'6	170'15
190'7	189'7	189'1	182'8	181'6	180'6	178'4	180'6	182'1	181'4	181'4	181'6	181'4	180'6	184'27
180'2	180'2	178'9	180'4	181'4	178'6	182'2	183'4	184'0	184'0	184'4	184'5	184'0	184'2	182'15
181'4	180'4	182'9	179'2	179'0	178'9	178'8	179'0	178'9	177'8	177'6	176'9	174'9	178'0	179'94
182'6	182'9	182'9	182'9	182'6	187'2	178'7	181'1	185'1	185'8	186'7	186'7	186'7	186'0	182'71
183'65	183'65	183'09	183'25	183'10	183'53	182'14	182'40	181'93	180'72	178'25	179'14	178'67	179'76	182'47

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

43'4	43'5	43'7	44'0	43'4	44'0	44'0	44'0	44'0	44'0	43'4	43'2	43'1	42'8	42'4	43'21
46'6	47'4	47'5	47'3	47'3	47'0	46'6	46'4	46'3	46'3	46'2	46'2	46'2	46'3	46'2	45'33
49'7	50'2	50'3	49'8	49'5	48'9	47'7	47'6	46'6	46'2	46'0	45'7	45'4	45'9	47'65	
47'7	48'2	48'4	48'3	48'3	48'1	47'2	47'0	46'8	46'6	46'4	46'4	46'4	46'3	46'4	46'88
45'4	45'2	45'0	44'0	43'6	43'0	42'5	42'3	—	—	—	—	—	—	—	43'65
40'2	41'4	41'4	41'4	41'4	41'6	41'4	41'0	40'6	40'2	40'0	39'8	39'7	39'3	38'9	39'87
42'0	42'2	42'6	42'6	42'7	42'8	42'9	42'8	42'6	42'6	42'5	42'3	42'1	41'9	41'32	
43'0	43'0	43'2	43'3	43'2	43'3	43'1	43'2	42'7	42'4	42'4	42'4	42'5	41'8	42'54	
39'9	39'9	39'2	39'0	38'3	37'9	37'7	36'8	36'4	36'0	35'1	34'1	34'0	33'7	38'32	
36'8	37'4	37'6	37'3	37'3	37'0	36'4	36'4	36'5	36'6	36'4	36'2	36'2	36'1	35'75	
40'0	40'6	40'6	40'9	41'3	41'2	41'2	41'2	—	—	—	—	—	—	—	38'32
43'9	44'0	44'6	45'0	45'4	45'4	45'0	44'9	44'9	45'2	44'6	44'4	44'5	44'2	43'20	
45'7	46'5	46'6	46'0	45'6	45'4	45'0	44'4	43'8	43'4	43'7	43'7	43'6	43'2	44'00	
48'2	48'3	47'7	47'7	47'2	45'8	45'9	45'6	45'2	44'8	44'7	44'4	44'0	44'2	45'72	
48'6	49'4	49'6	49'8	49'4	49'0	48'7	48'7	48'5	47'5	47'0	47'0	46'7	46'1	47'20	
50'0	50'2	49'6	49'4	49'3	49'3	49'3	49'3	49'3	48'3	47'6	47'4	47'0	46'6	48'12	
49'2	49'2	49'3	49'3	49'3	49'1	48'6	48'5	—	—	—	—	—	—	—	46'98
49'5	50'6	51'8	53'0	53'8	54'2	54'4	55'0	54'8	54'8	54'3	53'4	51'0	50'2	50'51	
50'2	50'4	49'8	49'6	49'5	49'0	48'7	48'5	48'4	49'0	51'2	51'9	49'5	49'3	49'67	
48'8	48'8	48'7	48'2	48'0	47'9	49'6	49'6	49'4	48'6	48'6	47'5	47'3	46'5	48'69	
45'8	46'1	45'9	45'4	45'0	44'8	44'5	44'4	44'7	44'5	44'4	44'4	45'0	46'6	45'13	
43'8	44'3	44'4	46'4	47'6	48'2	48'0	46'7	46'6	46'6	45'4	45'4	45'5	46'4	44'54	
47'4	47'4	47'2	47'0	46'8	46'4	45'7	45'5	—	—	—	—	—	—	—	45'48
46'0	46'2	46'0	46'3	46'4	46'2	46'4	46'3	46'2	46'2	45'4	45'0	44'9	45'0	44'81	
44'4	44'0	43'7	43'3	43'2	42'6	42'8	43'2	43'2	42'6	42'6	42'6	42'4	42'5	43'79	
45'07	45'37	45'34	45'29	45'20	45'00	44'83	44'61	43'82	43'55	43'29	43'13	43'14	43'09	43'93	

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Gettin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
MARCH.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	184'9	186'0	184'5	182'0	182'0	179'1	179'0	179'2	179'4	179'3	180'4	182'4
	2 186'3	187'2	188'5	188'9	188'9	187'8	187'3	187'0	186'8	186'2	186'2	186'1
	3 188'7	188'7	190'1	189'8	188'0	186'0	185'7	183'8	182'8	181'6	180'8	180'8
	4 186'4	188'0	188'0	183'8	179'5	178'9	178'9	179'4	179'7	181'4	183'2	184'6
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 192'2	193'5	192'4	189'9	187'2	186'5	184'5	184'5	186'3	186'7	185'6	185'6
	7 184'6	185'2	183'3	181'8	180'5	180'1	179'8	178'3	177'0	175'7	175'0	175'8
	8 174'8	172'4	171'2	169'5	169'3	169'9	170'6	170'6	170'2	170'2	174'5	170'3
	9 178'7	180'4	179'5	178'8	177'8	176'0	177'4	177'7	177'0	176'4	176'3	175'9
	10 186'8	187'0	186'4	183'8	180'3	177'6	177'6	178'3	178'3	176'2	175'0	175'8
	11 181'0	182'2	180'4	176'3	172'9	166'4	172'7	173'2	174'2	174'2	174'2	174'8
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 178'6	181'3	182'1	177'8	177'6	176'4	177'0	179'3	179'8	180'3	180'1	181'0
	14 184'3	184'3	184'3	177'8	181'5	181'8	182'8	183'8	185'7	185'5	185'3	185'3
	15 189'4	186'0	187'3	188'5	187'3	192'0	196'1	199'8	203'3	203'3	205'1	202'5
	16 194'3	195'8	195'0	193'4	193'4	192'1	190'8	191'8	190'9	189'3	188'5	188'6
	17 157'6	163'7	175'4	180'8	188'3	197'7	205'1	204'8	216'0	203'0	197'9	197'9
	18 188'8	187'9	189'3	185'2	183'8	182'6	182'6	182'7	185'4	186'6	184'6	186'7
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 136'8	146'4	167'0	172'7	180'6	186'5	188'8	200'9	225'5	224'9	209'5	207'7
	21 170'8	176'2	173'9	169'5	169'4	169'1	169'4	168'4	168'4	168'4	168'4	168'4
	22 176'3	176'1	174'9	173'3	172'6	172'6	173'5	174'8	174'8	174'2	175'2	175'5
	23 165'0	170'3	171'1	172'0	173'0	171'0	169'5	170'6	171'4	168'5	168'9	169'0
	24 166'0	169'0	168'3	166'8	166'5	168'1	169'2	171'8	171'6	168'6	168'1	168'3
	25 166'3	173'1	170'4	170'3	172'8	170'2	171'6	174'4	177'4	180'7	179'0	179'0
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 173'0	173'4	176'3	176'8	176'9	176'9	175'3	175'5	175'5	175'0	174'3	175'8
	28 176'4	176'8	176'7	174'9	173'1	172'0	173'3	173'4	171'2	170'6	170'5	168'1
	29 168'4	168'4	167'7	164'5	163'1	163'4	165'3	164'3	163'9	162'5	160'8	159'8
	30 163'8	165'1	164'2	162'2	161'3	161'3	161'3	162'1	163'2	163'9	163'7	163'9
	31 155'9	162'9	160'9	163'9	164'2	161'1	163'7	161'8	160'7	164'2	164'2	163'9
Hourly Means	176'15	178'05	178'86	177'66	177'48	177'13	178'07	179'34	180'64	179'90	179'09	179'01
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
MARCH.	1 42'4	41'6	42'4	42'7	43'0	43'7	44'3	44'1	45'0	44'9	45'3	45'3
	2 42'2	40'7	40'0	40'0	40'0	40'0	40'3	41'1	41'3	41'9	41'7	41'4
	3 39'7	39'7	39'6	39'0	39'4	40'6	41'3	41'9	42'7	43'4	44'0	44'0
	4 40'6	40'3	40'4	41'4	43'7	44'4	44'4	44'6	44'2	43'8	43'2	42'4
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 38'7	38'5	38'7	38'2	39'2	39'9	41'0	41'0	41'8	42'8	44'1	44'2
	7 43'6	43'6	43'8	44'5	44'4	44'5	45'4	45'9	47'1	48'1	48'2	48'2
	8 48'5	48'3	48'6	48'4	48'9	49'8	50'2	51'2	51'4	52'0	52'2	52'1
	9 47'1	46'5	46'4	46'0	46'3	46'6	46'7	47'0	47'3	48'2	48'5	48'6
	10 42'4	42'1	41'7	42'2	43'2	44'3	45'0	45'0	45'4	45'8	47'0	47'5
	11 44'4	44'0	45'0	46'0	46'8	47'4	47'6	47'6	48'0	48'3	48'8	48'4
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 45'4	44'4	44'4	44'8	44'4	44'5	44'4	43'9	43'7	44'1	44'3	44'5
	14 40'8	40'5	40'8	42'6	41'2	41'0	41'3	41'4	41'3	41'2	41'2	41'0
	15 35'3	35'1	35'3	36'0	36'1	36'3	36'4	36'4	37'2	37'2	38'0	38'0
	16 35'1	35'3	35'9	36'4	37'0	37'8	38'3	39'1	39'2	39'8	39'8	40'0
	17 40'5	40'5	40'8	40'6	40'6	41'2	41'6	41'8	42'4	42'5	42'6	43'7
	18 41'0	41'2	41'2	42'6	43'9	44'9	45'4	45'6	45'9	46'4	46'4	46'6
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 45'7	46'3	44'7	44'4	44'3	44'5	45'4	45'4	45'5	46'3	46'3	46'5
	21 49'0	48'8	49'4	50'6	51'3	52'1	52'5	53'2	53'4	54'2	55'0	55'2
	22 49'0	48'7	48'9	49'2	49'3	50'2	50'2	50'4	50'6	50'6	50'8	51'3
	23 54'4	53'4	52'2	51'5	51'8	52'2	52'8	52'8	52'4	52'2	53'0	53'2
	24 48'4	48'6	49'4	50'2	50'3	50'6	50'9	51'2	51'6	52'4	53'0	53'2
	25 51'2	50'8	51'1	51'3	51'1	51'2	51'0	51'4	51'6	52'1	52'5	52'6
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 47'3	47'1	47'2	47'1	47'3	48'2	49'2	50'2	50'4	51'2	51'4	51'4
	28 47'5	47'6	48'0	48'5	49'2	50'3	51'1	51'5	51'8	52'3	52'6	53'1
	29 52'2	52'4	53'2	54'0	54'8	55'0	55'0	55'2	55'6	56'4	57'3	58'2
	30 52'5	53'0	53'0	54'2	54'4	54'4	54'3	54'4	54'4	54'6	54'9	55'0
	31 53'0	52'8	52'3	52'2	52'9	54'0	54'7	55'2	55'4	56'2	57'2	57'2
Hourly Means	45'11	44'86	44'98	45'36	45'73	46'28	46'69	46'98	47'28	47'74	48'12	48'23

VERTICAL FORCE.												
One Scale Division = 0.00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
APRIL.	1	Sc. Div. 164.8	Sc. Div. 164.8	Sc. Div. 169.4	Sc. Div. 169.7	Sc. Div. 169.8	Sc. Div. 167.6	Sc. Div. 168.1	Sc. Div. 170.8	Sc. Div. 170.9	Sc. Div. 171.0	Sc. Div. 171.7
	2	—	—	—	—	—	—	—	—	—	—	—
	3	151.6	163.7	168.4	171.9	175.6	177.3	180.6	186.8	183.6	181.3	187.1
	4	169.5	168.0	167.5	166.9	165.6	165.0	168.3	167.9	168.9	170.4	171.1
	5	172.2	171.8	169.3	168.0	166.6	166.5	166.5	166.5	167.7	171.4	171.7
	6 ^a	171.7	174.5	168.5	166.1	165.8	164.6	164.6	164.7	168.9	168.0	165.5
	7	149.4	151.9	150.8	149.7	166.1	170.4	174.8	180.4	188.7	182.8	186.6
	8	172.5	171.5	172.0	170.0	168.3	168.3	166.5	166.1	165.9	165.1	162.6
	9	—	—	—	—	—	—	—	—	—	—	—
	10	166.2	164.9	164.9	161.8	158.8	157.1	155.7	155.7	155.7	154.9	154.1
	11	155.7	155.9	157.2	157.2	157.2	155.9	155.9	157.5	158.5	159.4	159.4
	12	164.0	162.7	161.3	160.6	157.4	158.0	158.0	159.4	159.4	159.0	157.6
	13	163.0	163.3	163.0	164.8	164.0	163.9	163.6	163.0	163.6	163.6	164.4
	14	173.4	171.7	172.0	170.0	168.9	167.4	167.4	166.6	167.2	167.0	166.2
	15	169.6	166.9	166.0	163.0	161.9	161.8	162.4	162.2	166.8	169.4	170.2
	16	—	—	—	—	—	—	—	—	—	—	—
	17	169.3	167.8	165.7	163.4	159.8	161.5	161.5	162.8	165.7	173.3	177.1
	18	174.5	174.2	174.2	174.2	172.0	167.9	167.9	171.7	175.7	177.3	176.4
	19	181.4	181.3	177.5	175.7	175.5	174.8	174.0	171.7	172.9	172.3	172.1
	20	175.4	173.9	171.3	169.9	170.1	169.0	169.5	169.9	169.5	169.6	169.6
	21 ^b	—	—	—	—	—	—	—	—	—	—	—
	22	171.3	169.4	164.6	164.6	165.5	165.5	165.0	162.9	165.4	165.4	165.4
	23	—	—	—	—	—	—	—	—	—	—	—
	24	171.8	171.8	171.9	171.8	171.9	168.3	166.1	169.7	169.7	169.3	171.6
	25	174.9	174.4	170.5	170.5	170.5	169.4	169.4	167.5	167.5	167.5	167.5
	26	170.4	168.9	166.5	166.2	165.6	166.2	167.7	166.7	167.0	166.8	166.5
	27	171.1	168.8	167.6	165.4	164.3	163.0	163.0	163.0	163.0	162.7	161.3
	28	165.5	165.5	166.6	165.7	164.9	163.7	163.7	166.3	164.9	164.9	165.6
	29	159.8	159.0	159.7	165.5	157.7	160.0	160.0	166.8	165.2	171.2	173.1
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		167.71	167.48	166.87	166.37	166.00	165.59	165.90	167.04	167.97	168.50	169.13
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
APRIL.	1	52.7	52.7	52.6	51.5	51.3	51.6	51.5	51.2	50.8	50.8	50.8
	2	—	—	—	—	—	—	—	—	—	—	—
	3	45.2	46.0	46.9	47.4	48.5	49.4	50.2	50.8	51.0	51.2	51.6
	4	53.2	53.1	53.0	53.2	53.3	53.4	53.4	53.5	53.4	53.6	53.7
	5	51.2	51.8	52.2	52.3	52.4	52.6	53.2	53.4	54.0	54.2	54.4
	6 ^a	50.8	51.2	52.0	54.2	53.1	53.8	54.2	54.2	54.7	55.2	56.0
	7	54.0	54.2	55.0	55.3	55.7	56.0	56.1	56.2	56.2	56.3	56.8
	8	51.2	51.5	52.3	53.6	54.2	54.7	55.0	55.4	56.0	56.6	57.4
	9	—	—	—	—	—	—	—	—	—	—	—
	10	55.0	55.5	56.2	57.4	58.6	59.0	59.2	59.5	60.0	60.6	61.2
	11	59.8	59.6	59.2	59.2	58.7	59.0	59.2	59.0	59.0	59.0	59.2
	12	55.2	56.2	56.2	56.4	57.1	57.4	57.5	57.8	58.1	58.5	59.2
	13	55.3	55.3	55.1	54.5	54.2	54.2	54.2	54.2	54.2	54.2	54.2
	14	50.2	50.4	50.5	51.0	51.2	51.4	52.0	52.3	52.8	53.2	53.8
	15	51.4	53.0	54.0	54.3	54.8	55.4	55.4	55.6	56.2	56.5	57.2
	16	—	—	—	—	—	—	—	—	—	—	—
	17	53.2	53.8	54.4	54.5	54.5	54.5	54.4	54.7	55.2	55.4	55.8
	18	50.8	50.3	50.3	50.1	50.0	50.1	50.1	49.8	49.2	49.2	48.8
	19	44.4	45.0	45.8	46.8	47.2	48.0	48.4	48.8	49.1	49.6	50.2
	20	48.5	48.6	49.8	50.2	50.4	50.7	51.0	51.4	51.8	52.3	53.0
	21 ^b	—	—	—	—	—	—	—	—	—	—	—
	22	54.0	53.4	53.5	53.5	53.2	53.4	53.9	54.7	55.1	55.5	56.2
	23	—	—	—	—	—	—	—	—	—	—	—
	24	47.7	47.5	48.0	48.0	48.0	49.0	49.4	49.6	50.3	50.4	50.5
	25	46.8	47.4	48.4	49.2	49.5	49.8	50.1	50.2	50.8	51.4	51.6
	26	50.2	51.0	52.1	52.2	52.3	52.5	52.2	52.1	52.2	52.4	52.6
	27	49.4	50.0	50.4	51.9	52.2	52.6	53.2	53.3	53.7	54.4	55.0
	28	52.3	52.1	51.5	51.4	51.4	51.9	52.0	52.2	52.2	52.8	53.2
	29	53.3	53.1	53.3	53.3	53.6	54.2	54.4	55.2	55.2	55.4	56.2
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		51.52	51.80	52.20	52.49	52.71	53.08	53.30	53.62	53.76	54.07	54.43

* Omitted in the Means, on account of disturbance.

b Good Friday.

VERTICAL FORCE.

One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
171°7	171°9	172°9	173°3	173°6	172°9	163°2	169°0	167°0	167°3	161°1	161°9	157°0	162°5	168°01
187°1	178°5	180°4	177°0	177°9	174°7	168°6	167°0	160°6	153°7	160°3	168°2	169°8	169°5	172°34
171°1	173°1	173°1	171°2	171°2	170°8	169°9	167°4	167°4	167°4	163°8	159°6	167°4	169°5	168°45
165°5	163°1	169°9	168°4	168°4	168°4	161°9	91°8	124°5	140°9	144°0	161°0	160°6	168°7	160°97
186°6	174°3	163°6	165°4	171°9	183°0	173°9	124°5	119°0	96°1	193°0	70°7	126°5	116°5	154°59
162°6	161°6	169°7	173°4	170°2	168°4	168°6	160°8	160°8	169°9	169°8	169°8	160°9	165°6	168°08
151°1	152°7	152°6	152°6	152°6	151°8	152°7	152°7	147°0	151°2	154°5	155°3	155°3	155°6	153°68
159°4	158°7	158°7	158°7	158°6	158°4	158°4	158°4	158°4	158°9	159°1	159°4	160°0	162°1	158°23
157°6	157°1	157°1	156°6	156°6	157°0	157°4	157°0	158°1	158°8	158°8	160°0	160°0	160°0	158°83
164°4	164°4	164°4	164°2	164°5	166°2	167°4	168°9	169°7	169°7	169°9	169°7	169°7	171°2	165°84
166°2	164°9	165°6	165°6	165°6	165°6	165°4	164°7	164°7	166°5	167°0	168°6	168°5	169°6	167°50
170°2	173°2	173°2	175°3	182°9	179°8	172°8	154°4	163°0	161°0	163°3	165°3	165°3	167°2	167°37
177°1	182°6	188°5	186°8	173°7	168°0	166°0	161°2	145°4	160°7	167°0	168°9	169°4	171°9	168°37
176°4	178°9	177°5	176°9	179°4	173°4	177°1	176°7	176°0	176°0	178°7	180°2	180°2	182°1	175°62
172°1	172°5	173°5	174°5	170°4	169°2	168°8	169°6	169°8	169°7	171°3	171°9	171°3	172°5	173°09
169°6	168°4	169°2	170°7	170°7	168°0	168°0	168°1	166°3	120°4	112°2	125°1	149°2	152°2	161°92
165°4	164°5	162°7	163°0	163°1	163°0	162°9	162°7	168°0	168°0	168°0	169°6	169°6	169°9	165°83
171°6	170°6	169°9	170°0	169°8	172°3	168°6	173°0	173°0	173°0	173°7	173°7	173°3	173°2	171°17
167°5	167°5	167°5	167°5	167°5	168°6	168°6	169°2	169°4	170°2	170°2	170°4	170°4	170°4	169°46
166°8	166°5	166°5	166°0	167°4	167°4	166°5	167°1	167°1	167°5	168°5	168°5	168°9	168°6	167°30
162°2	161°3	161°3	161°5	161°8	161°8	161°8	161°8	162°9	163°8	163°8	164°0	164°1	165°5	163°73
165°6	165°2	165°2	163°5	162°7	161°6	163°1	149°3	142°9	148°2	144°2	141°5	153°8	154°0	159°69
173°1	174°5	180°8	164°7	170°7	169°6	166°4	150°0	143°2	145°4	159°4	159°4	164°4	162°1	162°86
169°13	168°54	168°73	167°91	167°82	166°97	165°68	160°33	160°52	160°73	161°02	162°99	164°93	166°46	165°88

50°8	50°4	50°3	50°0	49°6	49°6	49°4	49°3	46°7	46°4	46°2	46°0	45°9	45°9	49°72
51°6	52°0	52°0	52°0	52°0	52°2	52°0	52°2	52°0	52°1	52°3	52°7	53°1	53°4	50°76
53°7	53°6	53°4	53°2	53°2	53°0	52°5	52°0	51°8	51°7	51°8	51°8	51°8	51°4	52°84
54°2	54°4	54°8	54°8	54°6	54°3	54°4	55°1	56°2	56°2	55°6	55°4	55°0	52°1	53°93
56°0	56°2	56°3	56°4	56°2	55°6	56°8	57°0	56°4	56°4	56°7	57°3	56°4	55°5	55°11
56°8	56°8	57°2	57°4	57°0	56°2	55°6	54°9	54°2	53°8	53°3	53°0	52°6	52°2	55°25
57°4	57°9	58°2	58°2	58°0	58°2	58°0	58°0	56°7	56°4	56°1	56°1	55°4	55°4	55°85
61°2	60°5	60°5	62°0	61°8	63°0	62°2	61°7	61°8	61°0	60°6	60°4	60°5	60°3	59°94
59°0	59°2	58°9	58°7	58°4	58°4	58°3	58°2	58°2	58°0	57°4	56°8	56°5	56°1	58°49
59°2	59°2	59°2	59°3	59°1	58°6	58°4	58°4	58°2	58°0	57°6	57°2	56°5	55°9	57°72
54°2	54°2	54°2	54°0	53°6	52°7	52°2	51°9	51°3	51°1	50°9	50°4	50°0	50°1	53°18
53°8	54°1	53°4	53°2	53°1	53°0	53°0	52°9	52°7	52°5	52°3	51°9	51°4	51°2	52°23
57°2	57°2	57°0	57°4	57°1	57°2	57°5	58°0	55°7	55°3	54°6	54°2	54°1	53°4	55°52
55°2	55°8	56°1	55°8	55°5	55°7	55°3	55°2	55°0	54°2	54°0	53°7	52°7	51°6	54°60
49°1	48°8	48°4	48°3	48°3	48°4	48°2	48°2	48°2	47°8	46°7	46°4	45°7	45°3	48°65
50°2	50°8	51°0	51°2	52°2	52°2	51°7	51°0	50°2	50°0	49°5	49°5	49°5	49°3	49°22
53°0	53°3	54°0	53°2	53°1	53°0	52°7	52°7	54°2	54°2	55°4	56°2	56°6	55°2	52°60
56°2	56°3	56°7	57°0	56°5	56°0	55°8	55°5	50°3	49°6	49°4	48°7	48°4	48°0	53°52
50°4	50°3	50°4	50°2	50°0	49°8	49°4	49°0	48°5	48°3	47°8	47°4	47°0	46°6	48°88
51°6	51°6	51°6	51°3	51°2	50°8	50°6	50°6	50°5	50°2	49°9	49°9	49°8	50°0	50°13
52°6	53°0	53°1	52°6	52°4	52°0	51°9	51°6	51°4	51°3	50°8	50°4	50°2	49°6	51°75
55°0	55°2	55°0	55°0	54°7	54°6	54°4	54°2	54°1	53°8	53°5	53°2	52°8	52°6	53°30
53°2	53°4	54°0	54°4	54°7	54°5	54°5	54°4	54°4	54°4	54°1	53°8	53°9	54°0	53°23
56°2	56°2	56°0	56°2	55°4	55°1	54°3	53°6	52°8	52°4	52°2	51°5	51°2	51°6	53°99
54°43	54°54	54°58	54°60	54°42	54°29	54°03	53°86	53°27	52°99	52°70	52°46	52°20	51°79	53°27

VERTICAL FORCE.											
One Scale Division is .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.64.											
Mean Göttingen Time.	0°. 00.	1°. 00.	2°. 00.	3°. 00.	4°. 00.	5°. 00.	6°. 00.	7°. 00.	8°. 00.	9°. 00.	10°. 00.
MAY.	169°0	168°6	168°6	168°5	168°4	168°3	168°3	168°2	168°1	168°0	167°9
	168°8	167°5	167°9	167°7	167°4	167°3	167°3	167°2	167°1	167°0	166°9
	158°1	158°2	155°5	154°7	153°6	151°9	151°3	151°1	150°0	150°0	150°0
	155°4	155°4	155°4	153°9	151°2	148°2	149°2	149°2	152°3	151°8	153°3
	154°3	152°1	149°7	147°9	145°8	146°0	143°4	141°7	141°2	141°2	140°7
	148°5	146°5	144°5	143°1	143°1	139°1	139°4	139°0	139°0	139°7	140°2
	130°4	130°8	137°5	141°2	149°2	149°7	153°8	157°8	165°8	171°5	166°2
	155°6	153°8	150°8	150°8	150°7	150°7	150°7	152°2	162°6	161°2	153°9
	126°6	128°3	134°2	135°7	148°3	152°4	150°4	152°8	153°3	155°5	159°5
	154°3	154°3	158°4	160°0	160°0	159°9	159°0	157°7	159°4	159°4	158°5
	163°3	162°0	160°9	159°3	156°9	155°0	155°0	155°3	158°0	160°9	161°7
	165°0	164°3	163°0	163°1	162°9	160°8	161°4	161°7	164°9	165°3	162°7
	165°3	163°1	160°5	158°5	157°2	155°7	155°2	155°2	155°2	155°2	157°6
	156°2	159°8	152°2	145°8	149°7	150°5	149°7	149°7	153°3	155°4	156°9
	155°4	152°6	152°6	151°6	149°6	147°9	149°1	152°5	157°9	153°3	152°2
	131°3	137°3	149°2	149°8	148°9	151°2	150°6	160°8	154°9	148°5	146°4
	151°0	51°3	149°7	145°2	140°4	139°4	141°1	141°6	142°6	141°1	143°8
	130°9	134°2	137°9	137°9	139°0	139°0	137°2	137°2	133°8	137°9	137°5
	147°0	146°3	146°3	145°6	142°9	141°5	140°5	143°3	143°3	144°9	144°6
	147°9	147°9	146°5	147°1	147°1	145°9	145°4	145°9	147°2	147°9	147°9
	149°2	148°8	148°8	144°1	142°0	140°5	139°3	140°4	143°1	140°1	140°1
	144°9	144°2	144°3	143°9	142°6	140°8	140°1	140°1	142°2	142°5	140°7
	143°4	142°8	145°2	140°2	138°0	137°7	137°1	137°3	138°0	138°0	138°2
	142°8	140°2	137°1	138°0	143°1	140°0	142°7	142°7	149°5	148°2	148°4
	140°0	140°0	140°0	135°8	135°8	135°2	137°2	137°0	137°6	137°6	135°7
	138°7	138°1	135°8	135°2	133°9	133°9	134°3	135°4	133°1	136°2	136°9
	148°6	147°5	146°4	142°4	142°1	145°0	143°9	144°4	146°1	150°5	152°1
Hourly Means	149°63	149°48	149°59	148°26	148°22	147°49	147°66	148°92	150°34	150°69	150°46
TEMPERATURE OF THE VERTICAL FORCE MAGNET.											
MAY.	51°0	50°7	50°7	51°2	51°7	52°6	53°0	53°2	53°2	53°4	53°8
	52°2	52°2	52°4	53°0	54°0	54°8	55°2	56°1	56°8	57°5	58°2
	56°3	57°0	57°3	58°2	59°2	59°7	60°0	60°0	60°0	60°5	61°4
	58°1	58°3	58°4	58°8	59°2	59°5	60°0	59°4	60°2	60°2	59°6
	59°6	60°8	61°8	61°5	62°5	63°5	64°0	64°5	65°4	66°0	66°3
	63°2	63°7	64°1	64°3	65°0	65°5	65°8	66°5	67°0	67°7	68°3
	60°0	60°0	60°0	60°4	60°0	60°5	60°6	61°3	60°4	61°7	62°2
	58°8	59°1	59°2	60°4	60°7	61°0	61°2	61°0	61°2	61°0	61°5
	59°3	60°0	60°3	60°3	60°9	60°7	61°0	61°5	61°9	62°0	62°2
	57°2	57°0	57°0	57°0	57°1	57°4	57°5	57°5	57°2	57°2	57°4
	54°3	54°4	55°0	55°6	56°4	57°1	57°2	57°6	58°0	58°6	59°2
	54°2	54°1	54°0	54°5	54°5	53°7	53°4	53°5	54°1	54°5	55°2
	53°2	53°8	54°7	55°2	55°6	56°2	57°1	57°2	57°7	57°7	57°9
	56°6	57°0	57°2	57°4	58°0	58°4	58°8	59°2	59°4	59°8	60°0
	57°2	57°4	58°2	58°2	59°2	60°2	60°4	60°2	60°5	61°5	62°3
	60°2	60°3	61°0	61°0	61°5	62°0	62°4	63°1	63°5	64°1	65°0
	62°4	62°4	62°5	63°7	64°8	65°7	66°7	68°1	68°5	69°3	69°3
	64°7	64°5	64°7	65°4	65°7	66°5	67°3	67°7	68°0	68°5	68°3
	63°0	62°9	62°7	63°4	63°6	64°0	64°5	64°3	64°4	64°6	64°8
	62°0	62°0	62°2	61°8	61°7	61°8	61°7	61°6	61°5	61°7	62°4
	60°3	60°5	60°7	61°2	61°8	62°5	63°0	63°8	64°7	65°5	66°3
	63°5	63°5	63°5	63°5	63°9	64°8	65°3	66°0	66°5	67°2	68°5
	64°7	64°8	65°5	65°4	65°6	65°7	65°9	66°5	67°0	67°3	67°6
	63°5	63°5	63°6	64°4	64°5	64°9	65°3	65°5	65°5	66°5	67°4
	65°5	65°8	66°0	65°8	66°3	66°5	67°0	67°6	68°0	68°6	69°4
	65°7	66°5	67°0	67°0	67°5	67°5	67°5	67°7	67°9	67°9	68°5
	60°0	60°0	60°0	60°0	60°3	60°1	60°1	60°0	60°4	60°5	60°7
Hourly Means	59°51	59°71	59°99	60°32	60°79	61°21	61°54	61°85	62°15	62°61	63°05

VERTICAL FORCE.

One Scale Division = $\frac{1}{100000}$ parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.	No. Div.
173°0	169°0	170°0	169°7	161°1	161°1	161°2	157°6	157°8	157°8	157°5	161°4	158°9	166°1	164°89
157°8	157°8	157°8	159°7	161°4	153°3	158°9	158°5	157°9	160°2	157°7	149°3	147°9	156°3	159°38
153°3	156°4	154°7	152°8	153°4	148°3	151°1	151°1	152°8	152°3	153°1	154°1	141°4	151°0	153°16
153°3	153°4	153°6	152°8	153°5	152°3	153°3	154°4	154°3	154°3	154°4	154°8	154°3	154°3	153°12
140°7	140°5	143°2	144°3	142°2	145°4	144°6	144°6	142°2	140°5	140°5	140°6	143°8	147°5	144°41
140°2	138°6	138°0	136°8	138°6	138°8	138°8	139°3	—	—	—	—	—	—	139°76
—	—	164°4	161°5	159°6	159°3	155°9	151°3	149°3	144°9	149°4	151°6	154°6	155°2	153°14
166°2	164°4	160°9	150°6	150°7	150°2	150°2	150°2	150°2	149°9	150°9	151°1	151°1	140°8	151°82
159°5	163°4	161°3	157°9	155°2	159°0	140°9	152°7	151°2	140°6	142°2	141°6	153°4	153°4	158°75
158°5	158°7	158°0	157°5	158°3	157°3	157°3	157°3	159°4	159°6	159°6	159°8	161°0	163°0	158°65
161°7	160°1	160°1	157°8	157°8	157°8	158°0	154°4	154°7	158°8	159°8	161°8	161°5	163°9	158°99
162°7	163°0	163°0	163°2	166°2	166°2	166°2	164°2	—	—	—	—	—	—	164°15
—	—	155°4	156°1	155°8	156°2	156°2	155°4	155°4	156°5	155°9	155°9	157°1	157°1	156°98
157°6	155°8	156°9	150°5	149°9	151°5	151°5	153°2	153°2	153°8	154°7	156°2	157°4	157°5	153°29
152°2	150°9	150°3	150°3	153°3	158°7	161°1	164°1	150°3	133°6	129°5	122°3	144°2	144°5	149°49
146°4	143°7	151°9	208°2	190°1	151°8	166°8	154°7	153°2	148°2	148°2	149°2	150°7	151°0	154°02
143°8	143°5	140°2	140°3	139°4	139°4	137°4	137°7	132°9	125°0	134°1	130°3	133°5	130°9	139°78
137°5	138°6	137°6	137°6	137°6	138°6	137°9	138°5	—	—	—	—	—	—	137°97
—	—	143°6	143°5	143°1	143°4	143°4	143°7	143°5	144°6	145°2	145°2	145°2	145°5	144°21
144°6	144°9	147°9	147°7	146°7	148°0	148°8	148°8	148°8	149°0	149°0	149°3	149°5	148°5	147°79
140°1	139°0	142°7	147°4	144°6	144°2	144°2	144°2	144°7	140°2	131°6	135°6	143°9	143°9	142°73
140°7	141°8	141°8	140°2	140°2	140°0	145°0	136°4	128°4	138°3	141°5	143°5	144°6	144°8	141°37
138°0	138°2	138°0	138°0	135°3	133°7	137°6	139°3	122°4	119°0	117°1	133°5	143°7	140°6	136°34
148°4	152°7	147°6	143°7	141°5	140°8	139°8	138°8	—	—	—	—	—	—	141°90
—	—	133°9	133°5	133°3	133°8	133°8	131°6	132°6	133°7	133°7	133°7	133°9	139°3	135°60
135°7	135°7	136°9	137°6	137°6	138°2	140°2	140°0	140°4	142°9	140°6	141°0	141°0	148°5	138°78
152°1	154°5	145°5	153°7	155°8	172°3	159°9	131°8	135°9	132°1	151°1	154°3	156°1	157°8	149°12
150°46	150°32	150°07	151°60	150°60	149°79	149°62	147°93	147°13	144°57	145°67	146°12	148°94	149°89	148°87

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

53°8	54°1	54°3	54°2	54°2	54°5	54°3	53°8	53°4	52°8	52°2	52°3	52°4	52°4	52°89
58°2	58°2	58°0	58°0	57°8	57°6	57°4	57°2	56°6	56°8	57°0	57°0	56°8	56°2	56°13
61°0	61°4	61°5	61°4	61°2	61°3	60°7	60°5	60°0	59°7	59°2	58°9	58°6	57°6	59°63
60°0	59°6	59°6	59°2	59°0	59°0	59°0	59°0	59°0	58°8	58°9	59°0	59°0	59°2	59°18
66°4	66°3	66°0	65°6	65°5	65°5	65°2	64°7	64°5	64°3	64°0	63°7	63°2	63°2	64°07
68°3	69°2	69°1	68°7	68°4	68°3	68°1	68°0	—	—	—	—	—	—	65°51
—	—	61°5	61°3	61°3	61°5	61°2	61°0	60°5	60°2	60°0	59°5	59°2	58°2	60°60
62°2	62°0	61°4	61°2	61°0	60°5	60°3	60°3	60°3	60°0	59°8	59°7	59°2	59°2	60°37
61°0	61°5	61°2	61°1	60°6	60°3	60°0	59°6	59°2	59°2	59°0	58°5	58°2	58°0	60°27
57°4	57°5	58°1	57°8	57°6	57°4	57°2	56°7	56°3	56°0	55°7	55°5	55°0	54°4	56°86
59°2	59°4	59°4	59°0	58°9	58°9	58°7	57°8	57°4	56°2	55°4	55°2	55°0	54°6	57°05
55°2	54°6	54°2	53°4	53°2	53°0	53°0	52°8	—	—	—	—	—	—	53°67
—	—	57°9	57°8	57°5	57°4	57°5	57°2	57°3	57°2	57°0	57°0	57°0	57°0	56°75
57°9	58°0	60°0	60°0	60°2	59°8	59°2	59°0	58°5	58°1	57°5	57°2	56°7	56°5	58°52
62°0	62°3	62°4	62°3	62°3	62°2	62°0	61°3	61°1	61°2	62°0	62°2	60°2	59°7	60°68
65°0	66°2	66°4	66°5	67°3	67°4	67°2	65°8	65°4	64°7	63°5	63°0	62°6	62°5	63°86
69°3	69°0	69°0	68°8	68°0	67°5	67°0	67°2	66°5	66°5	66°1	65°7	65°4	65°2	66°47
68°5	68°3	68°3	68°2	68°0	68°0	67°5	67°3	—	—	—	—	—	—	66°13
—	—	65°0	65°0	65°0	64°6	64°4	64°0	63°5	63°0	62°5	62°5	62°3	62°1	63°80
62°4	62°6	62°4	62°3	62°0	61°5	60°8	60°7	60°6	60°4	60°5	60°5	60°5	60°4	61°48
66°3	67°3	67°6	67°6	67°3	66°8	66°7	66°5	66°3	65°5	64°8	64°5	64°0	63°5	64°53
68°5	68°8	68°8	68°8	68°1	67°6	67°2	66°6	66°4	66°0	65°5	65°0	64°5	64°4	66°00
67°3	67°6	67°7	67°5	68°5	69°0	68°5	67°4	67°0	66°1	65°5	64°6	64°0	63°5	66°29
67°0	67°4	67°5	67°5	67°4	67°3	67°0	66°6	—	—	—	—	—	—	65°67
—	—	69°9	69°9	70°1	70°0	69°6	69°0	68°5	68°3	68°0	67°0	66°5	65°8	67°86
69°4	69°5	66°8	66°4	66°5	66°4	66°0	65°2	63°8	62°1	61°2	60°6	60°0	59°5	65°53
60°5	60°7	30°6	60°4	61°0	60°5	60°3	61°5	61°5	60°0	59°2	59°0	58°5	58°0	60°11
63°05	63°16	63°13	62°96	62°89	62°73	62°44	62°10	61°46	61°02	60°67	60°38	60°06	59°74	61°48

VERTICAL FORCE.												
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
JUNE.	1	156'4	154'9	152'6	150'2	148'7	145'7	144'6	146'6	146'6	146'6	146'5
	2	152'7	149'7	147'9	147'6	144'8	143'5	141'0	142'2	142'5	141'9	141'4
	3	142'9	143'1	143'0	139'6	137'6	136'3	135'8	136'2	135'1	135'0	135'0
	4	—	—	—	—	—	—	—	—	—	—	—
	5	136'8	136'8	134'3	133'6	134'1	134'2	135'7	136'9	137'3	140'4	143'8
	6	145'9	144'4	145'2	145'4	146'4	146'4	146'4	147'7	147'7	148'5	148'5
	7	150'6	150'9	146'7	144'7	145'8	145'8	144'6	144'3	144'3	145'3	144'0
	8	146'9	146'1	143'1	143'1	141'9	140'4	138'0	139'8	141'3	141'1	140'7
	9	144'2	142'9	142'9	141'2	141'0	138'0	135'0	132'9	132'9	131'6	132'5
	10	138'5	138'7	137'1	135'0	132'2	131'2	131'2	132'3	134'2	133'7	137'2
	11	—	—	—	—	—	—	—	—	—	—	—
	12	143'5	143'9	143'1	141'7	141'8	140'5	140'7	141'1	143'6	145'7	145'7
	13	148'5	151'0	147'7	144'8	143'0	143'8	144'7	144'9	144'9	144'9	144'9
	14	152'8	152'4	151'3	151'3	150'9	148'6	148'6	148'1	149'2	152'9	153'8
	15	146'4	144'7	138'8	136'7	132'6	130'1	125'3	123'3	123'3	123'6	119'2
	16	123'3	122'6	120'4	118'7	117'7	115'2	114'9	113'4	111'5	112'8	113'0
	17	122'0	121'0	120'5	118'7	117'4	115'3	115'1	114'0	115'3	116'1	116'0
	18	—	—	—	—	—	—	—	—	—	—	—
	19	126'3	125'5	122'9	116'4	119'5	118'3	119'0	117'6	119'0	118'8	118'8
	20	123'7	123'7	125'0	124'9	124'1	124'1	123'5	123'1	125'7	125'7	128'2
	21	130'8	132'8	133'1	131'5	132'4	129'8	125'0	125'0	129'4	135'9	138'1
	22	128'4	131'8	136'7	134'5	131'5	132'6	136'0	139'2	141'2	146'1	150'8
	23	141'1	147'8	137'1	137'1	136'4	136'4	132'1	131'8	128'7	129'3	129'3
	24	138'5	138'5	138'0	129'3	129'5	136'3	135'7	133'2	134'6	132'7	130'9
	25	—	—	—	—	—	—	—	—	—	—	—
	26	129'6	128'3	126'7	121'5	121'0	120'0	121'0	119'8	119'8	119'8	121'8
	27	132'0	131'8	129'3	126'4	125'7	122'6	120'3	120'3	121'6	120'5	120'9
	28	126'3	125'4	125'4	123'3	121'0	119'9	117'8	117'8	119'0	121'7	123'3
	29	132'2	130'2	127'0	124'4	123'4	121'9	123'8	123'8	123'8	121'6	121'8
	30	131'9	131'9	129'3	128'1	126'8	126'6	126'4	124'2	124'1	124'2	125'4
Hourly Means		138'28	138'11	136'35	134'22	133'35	132'44	131'62	131'45	132'12	132'95	133'53
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
JUNE.	1	58'4	59'0	59'6	59'6	59'6	60'1	60'4	60'5	61'0	61'5	61'9
	2	59'3	59'7	60'3	61'0	62'0	62'7	63'1	63'5	64'0	64'5	65'0
	3	61'0	64'8	65'0	65'5	66'0	66'8	67'8	68'5	68'5	69'0	69'5
	4	—	—	—	—	—	—	—	—	—	—	—
	5	66'5	66'4	66'5	66'7	67'3	67'4	67'5	67'5	67'4	67'3	67'4
	6	62'0	62'0	62'0	62'1	61'5	61'5	61'5	61'8	62'0	62'4	62'7
	7	59'8	59'7	59'8	60'3	60'5	60'5	60'6	61'0	61'5	62'1	62'8
	8	60'5	60'4	60'8	61'2	62'2	63'0	63'3	63'5	64'1	64'6	65'4
	9	62'5	63'2	63'5	63'8	64'6	65'5	66'0	66'5	67'1	68'0	68'4
	10	65'9	66'2	66'5	67'1	68'0	68'3	68'5	68'7	69'0	69'3	69'7
	11	—	—	—	—	—	—	—	—	—	—	—
	12	62'0	62'0	62'2	62'3	62'5	62'4	61'9	61'7	61'9	61'8	62'6
	13	59'4	59'5	59'6	59'7	59'8	60'2	60'4	60'3	60'3	61'0	61'5
	14	58'8	58'8	58'4	58'2	58'5	59'2	59'4	59'4	59'7	60'2	60'8
	15	61'0	62'0	63'0	63'5	65'6	67'5	70'0	71'6	73'4	75'0	76'4
	16	74'3	74'4	75'4	76'2	77'0	78'0	78'5	79'5	79'8	80'7	81'0
	17	74'7	74'9	75'1	75'3	77'2	77'1	77'6	78'4	78'0	78'4	78'9
	18	—	—	—	—	—	—	—	—	—	—	—
	19	72'5	72'5	73'0	73'5	73'5	74'1	74'5	75'1	75'5	75'4	75'5
	20	72'0	72'0	72'5	72'8	73'0	73'1	73'5	73'5	73'7	73'8	74'0
	21	69'8	69'5	69'0	69'2	69'5	69'5	69'5	69'5	69'7	70'0	70'6
	22	67'3	67'3	67'7	68'5	68'8	69'3	69'5	70'1	70'4	70'8	71'0
	23	67'5	67'5	67'6	68'4	67'6	68'4	69'5	70'3	71'5	71'6	71'5
	24	67'0	67'6	67'6	68'0	68'5	69'0	69'0	69'3	69'5	69'7	70'5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	69'6	70'0	70'9	72'0	72'5	73'3	74'0	75'5	75'9	76'3	76'7
	27	70'7	70'5	71'1	72'0	72'1	72'7	73'1	73'5	74'5	75'0	75'5
	28	72'6	72'5	72'5	72'7	72'9	72'9	72'9	72'9	72'9	73'0	73'5
	29	69'1	69'5	70'5	71'0	71'5	72'0	71'6	72'0	72'5	73'1	73'5
	30	68'6	68'8	69'8	70'3	70'5	71'3	71'6	72'3	72'5	73'2	73'5
Hourly Means		65'99	66'18	66'53	66'96	67'41	67'92	68'28	68'71	69'09	69'53	69'99

ature, 1° 64.

10h.	11h.
Sc. Div.	Sc. Div.
146°6	146°5
141°4	141°4
135°0	135°0
—	—
143°8	143°8
148°5	148°5
144°0	143°8
141°1	140°7
132°5	132°7
137°2	140°3
—	—
145°7	145°7
144°9	144°9
153°8	160°4
119°2	119°2
113°0	114°0
116°0	117°0
—	—
118°8	121°1
128°2	129°4
138°1	137°2
150°8	145°1
129°3	133°5
130°9	131°5
—	—
121°8	121°3
120°9	122°7
123°3	124°4
121°6	121°8
125°4	125°4
133°53	134°13

5

61°9	62°4
65°0	65°5
69°5	69°7
—	—
67°3	67°4
62°7	62°7
62°8	63°1
65°4	65°5
68°4	68°5
69°7	69°7
—	—
62°6	62°8
61°5	62°0
60°8	61°0
76°4	76°7
81°0	80°5
78°9	78°5
—	—
75°5	75°5
74°0	74°0
70°6	71°3
71°0	70°6
71°5	71°3
70°5	70°5
—	—
76°7	76°7
75°5	75°5
73°5	73°5
73°5	73°6
73°5	73°5
69°99	70°08

VERTICAL FORCE.

One Scale Division = 0.00066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
146°6	146°7	146°7	147°4	147°8	148°4	148°4	148°4	149°3	150°5	151°8	153°3	148°80
141°4	141°1	140°6	138°8	140°3	140°3	141°3	141°3	141°3	142°6	142°6	142°6	142°95
134°1	140°4	136°1	135°4	135°9	121°7	—	—	—	—	—	—	137°03
—	—	—	—	—	—	138°6	138°6	137°5	137°5	139°1	139°3	139°49
142°8	140°9	139°9	138°9	139°6	140°0	138°4	140°2	141°9	141°9	147°5	148°0	148°0
148°5	148°6	146°8	146°8	147°4	147°4	150°3	148°5	149°3	150°6	151°6	153°5	147°93
143°6	143°6	143°7	144°6	145°7	147°2	146°5	148°7	149°6	150°5	150°5	151°5	146°52
140°7	140°7	141°5	140°0	141°3	138°4	139°2	140°2	142°4	144°1	144°7	144°9	141°60
132°8	133°6	134°1	134°1	134°3	136°3	137°0	137°0	137°9	136°3	136°3	136°3	136°41
140°3	136°0	136°0	136°0	136°0	136°3	—	—	—	—	—	—	—
—	—	—	—	—	—	140°6	140°6	143°4	143°6	144°5	142°1	137°37
145°8	145°8	145°7	145°8	146°5	146°5	146°8	149°3	150°5	150°5	150°5	152°0	145°53
145°4	145°4	145°4	145°6	145°6	146°0	142°5	139°4	147°1	149°2	150°7	150°7	145°88
154°2	149°0	147°2	145°8	144°4	145°7	144°3	141°4	141°4	140°9	149°5	149°7	148°91
118°8	118°8	118°7	118°1	118°1	119°5	119°5	120°8	120°8	120°8	125°0	123°3	125°22
113°0	113°0	111°8	113°4	113°6	113°8	116°0	117°3	117°8	118°5	119°7	120°7	116°09
117°0	117°0	121°8	122°0	122°0	122°0	—	—	—	—	—	—	119°45
121°1	126°5	122°3	123°2	124°6	124°6	124°0	123°0	122°4	122°1	120°9	119°7	121°57
131°7	131°5	124°9	128°9	128°6	130°3	130°3	130°6	130°3	130°3	132°7	134°1	127°72
130°7	132°1	133°2	131°5	127°4	127°9	119°8	124°0	123°6	114°8	105°4	111°7	127°63
142°0	141°3	134°6	133°5	130°8	130°0	124°3	124°3	117°5	127°8	134°6	144°1	135°18
133°5	133°7	133°7	131°8	131°8	132°3	132°3	125°6	126°5	131°4	133°9	133°9	133°50
132°2	132°2	134°3	131°6	129°3	129°3	—	—	—	—	—	—	131°54
121°3	123°0	122°1	122°0	123°0	123°3	123°5	123°5	124°4	121°4	128°5	128°8	123°27
122°7	123°2	122°6	122°6	122°6	122°0	122°6	123°8	123°8	124°1	126°8	126°3	124°05
124°4	124°0	124°3	125°9	127°8	127°8	127°8	124°0	125°3	128°4	130°1	131°8	124°45
121°9	122°0	121°5	123°9	123°9	124°8	125°5	123°5	119°7	121°1	125°5	125°4	123°92
123°5	123°5	127°5	123°4	124°0	123°4	123°4	123°8	123°8	121°4	122°1	123°7	125°32
133°46	133°60	132°96	132°73	132°78	132°51	132°98	132°47	132°69	133°60	135°28	136°27	133°74

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

62°5	62°5	62°4	62°2	61°9	61°5	61°2	61°0	60°4	60°0	59°8	58°8	60°76
65°5	65°6	65°7	65°2	65°2	65°3	65°1	65°0	64°7	64°6	64°5	64°2	63°80
69°5	69°6	68°9	68°7	68°5	68°3	—	—	—	—	—	—	67°25
—	—	—	—	—	—	66°2	66°0	66°0	66°0	65°7	65°6	—
67°0	66°7	66°4	66°0	65°8	65°5	64°8	63°7	63°1	62°5	62°0	61°7	65°85
62°5	62°2	62°3	62°1	62°0	61°8	61°6	60°5	60°3	60°0	59°5	59°0	61°58
63°3	63°0	62°7	62°5	62°0	61°4	60°5	60°2	60°0	59°6	59°4	59°0	61°05
65°5	65°5	65°1	64°7	64°5	64°5	64°1	63°6	63°4	62°9	62°6	62°4	63°47
68°7	68°7	68°6	68°5	68°0	67°6	67°4	67°2	66°7	66°2	66°0	66°0	66°55
69°7	69°9	69°7	69°6	69°2	68°6	—	—	—	—	—	—	—
—	—	—	—	—	—	64°0	63°6	62°7	62°5	62°1	61°9	67°10
62°6	62°9	63°0	61°5	61°2	60°5	60°2	60°0	59°6	59°2	59°0	58°8	61°44
62°3	62°0	61°6	61°5	61°4	61°0	60°6	60°3	60°1	59°7	59°4	59°1	60°53
61°5	61°6	62°0	62°4	61°7	61°5	61°5	61°5	60°9	60°4	60°1	60°3	60°32
77°3	77°5	77°5	77°0	76°6	75°7	75°0	74°7	74°6	74°4	74°0	74°0	72°26
80°8	81°0	81°0	79°8	79°3	78°6	77°7	77°5	77°1	76°6	76°1	75°3	78°17
78°3	77°5	76°0	76°5	76°5	76°4	—	—	—	—	—	—	76°22
—	—	—	—	—	—	75°0	74°5	74°3	73°7	73°5	73°0	74°00
75°5	74°7	74°7	74°5	74°3	73°7	73°7	73°5	73°3	73°0	72°6	72°4	73°74
73°4	73°0	72°5	72°1	71°6	71°3	70°9	70°0	69°6	69°2	69°0	68°5	72°10
71°3	71°3	70°5	70°8	70°8	70°5	70°5	70°5	70°0	69°5	69°4	68°3	70°02
70°2	70°5	70°0	69°8	69°6	69°5	69°3	69°1	69°0	68°5	68°5	68°2	69°31
71°1	70°8	70°5	70°5	70°2	69°7	69°5	68°7	68°2	67°9	67°5	67°2	69°35
70°6	70°5	69°6	69°8	70°0	69°4	—	—	—	—	—	—	69°67
—	—	—	—	—	—	71°7	71°5	71°2	70°7	70°5	70°4	—
76°7	76°0	75°6	75°0	74°3	73°7	73°3	73°0	72°7	72°5	72°0	71°5	73°74
75°0	74°8	74°8	75°0	74°6	74°4	73°7	73°4	72°7	72°7	73°0	73°5	73°55
73°2	73°0	73°0	72°5	72°3	71°6	71°5	71°0	70°6	70°6	70°0	69°3	72°25
73°5	73°5	73°3	73°3	72°6	72°3	71°5	71°1	70°8	70°5	69°6	69°4	71°72
74°0	74°0	73°5	73°7	73°8	73°6	73°5	73°3	72°7	72°5	72°0	71°0	72°23
70°05	69°93	69°65	69°44	69°15	68°77	68°25	67°89	67°53	67°15	66°83	66°51	68°24

January 21st and 22nd.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0°721.						DECLINATION.			
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	113°0	114°4	114°2	115°8	116°2	115°8	117°8	113°8	115°0	115°7
5	0	113°0	114°1	114°8	116°0	116°2	115°9	116°0	114°0	115°2	115°7
10	0	113°1	114°2	114°8	116°0	116°1	116°0	115°3	114°0	115°0	115°6
15	0	113°3	114°3	115°0	116°0	116°1	116°3	114°2	114°0	115°0	115°6
20	0	113°7	114°2	115°1	116°2	116°1	118°0	114°2	114°0	115°2	116°0
25	0	113°8	114°2	115°0	116°0	116°0	120°0	114°0	114°2	115°2	116°0
30	0	114°0	114°1	115°0	116°1	116°0	121°2	114°2	114°2	115°2	115°9
35	0	113°9	114°7	115°0	116°5	116°0	122°2	113°8	114°4	115°2	116°0
40	0	113°8	114°8	115°0	116°9	116°0	122°0	113°5	114°4	115°2	116°1
45	0	113°9	114°5	115°0	116°7	116°1	121°0	114°0	114°2	115°3	116°2
50	0	114°0	114°1	115°0	116°5	116°0	120°2	113°8	114°5	115°5	116°2
55	0	114°1	114°2	115°3	116°3	115°8	118°8	114°0	114°7	115°4	116°2
One Scale Division = '000087 parts of the H. F.											
HORIZONTAL FORCE.											
M.	S.										
2	0	625°0	621°3	622°0	621°0	620°0	618°0	621°2	621°2	620°7	620°4
7	0	625°3	621°8	622°2	620°5	620°0	618°0	620°0	619°4	620°6	620°4
12	0	625°1	622°0	621°0	620°0	620°0	617°0	620°0	619°8	620°2	620°6
17	0	625°0	622°0	621°4	620°0	620°0	616°0	619°2	619°7	620°6	620°8
22	0	625°0	621°8	622°0	620°0	619°0	614°0	617°4	620°0	620°5	620°6
27	0	625°0	621°8	622°0	620°0	619°0	614°0	618°2	620°2	620°8	620°9
32	0	624°2	621°8	622°0	619°0	619°0	614°5	618°2	620°0	620°4	620°4
37	0	624°2	621°5	622°0	619°0	618°8	615°5	619°4	620°2	620°0	620°5
42	0	624°0	622°0	622°0	620°0	619°0	617°0	619°2	620°4	620°4	620°6
47	0	623°2	622°0	622°0	620°0	619°0	618°6	619°0	620°0	620°6	620°6
52	0	623°0	622°2	621°0	620°0	619°0	622°0	620°0	621°2	620°4	620°4
57	0	622°1	622°2	620°6	620°0	618°0	622°0	621°4	620°8	620°6	620°4
Thermometer		43°8	43°9	44°2	45°0	45°0	44°5	43°5	42°0	41°6	41°3
One Scale Division = '000063 parts of the V. F.											
VERTICAL FORCE.											
M.	S.										
3	0	176°5	175°9	171°9	170°1	173°2	171°9	172°9	174°2	174°5	175°5
8	0	176°5	175°7	171°9	170°1	173°8	171°9	173°1	174°2	174°5	175°3
13	0	176°5	175°7	171°4	170°5	173°8	171°9	173°6	174°2	174°5	176°8
18	0	176°5	175°7	171°4	171°1	173°8	172°0	173°6	174°0	174°5	176°8
23	0	176°5	174°9	171°4	171°1	173°8	172°0	173°6	174°1	174°5	176°8
28	0	176°5	174°9	171°4	171°8	173°0	172°0	173°8	174°1	174°3	177°8
33	0	176°5	174°9	171°4	171°8	172°6	172°0	173°6	174°1	174°3	177°9
38	0	176°5	173°1	171°1	171°8	172°6	172°0	173°9	174°1	174°3	178°0
43	0	176°5	173°1	171°1	171°8	172°6	172°0	173°8	174°6	175°2	178°0
48	0	176°5	173°1	171°1	172°5	172°6	172°6	173°6	174°4	175°2	178°0
53	0	176°5	172°5	170°6	172°5	172°6	172°6	173°6	174°4	175°4	178°0
58	0	176°5	172°5	170°6	172°5	171°9	172°9	174°3	174°4	175°4	178°0
Thermometer		42°6	42°8	44°6	45°6	44°6	44°8	44°1	42°8	41°8	41°2
Increasing Numbers denote decreasing Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
			In.	°	Dry.	Wet.	Direction.	Force.			
D.	H.	M.									
21	10	0	29°545	25°6	24°9		N. by W.	Light.	Clear; cir.-cum. and haze.		
	11	0	29°554	25°5	24°2		N. by W.	Moderate.	Clear; cir.-cum. and haze.		
	12	0	29°598	24°2	22°6		N. by W.	Light.	Clear; cir.-cum. and haze.		
	13	0	29°616	23°0	21°1		N.	Light.	Cloudy; cir.-cum.		
	14	0	29°653	20°6	18°9		N.	Fresh.	Cloudy, with haze.		
	15	0	29°690	17°1	16°9		N. by W.	Brisk, with gusts.	Clear; cir.-cum.		
	16	0	29°712	15°5	13°4		N. by W.	Fresh.	Clear; cir.-cum.		
	17	0	29°755	11°6	11°8		N.N.W.	Brisk, with gusts.	Clear; cir.-cum.		
	18	0	29°812	8°8	9°2		N.N.W.	Brisk.	Cloudy, with haze.		
	19	0	29°839	6°0	6°5		N. by W.	Brisk, with gusts.	Cloudy, with haze.		
	20	0	29°928	3°3	3°8		N.	Moderate, with gusts.	Cloudy; cum. and cir.		
	21	0	29°967	1°2	1°1		N.N.W.	Brisk, with gusts.	Cloudy, with haze.		

* At 22° 10', Thermometer of H. F., 39° 5'; of V. F., 39° 0'.

19 ^h .	20 ^h .
Sc. Div.	Sc. Div.
115°7	116°2
115°7	116°3
115°6	116°3
115°6	114°4
116°0	116°4
116°0	116°2
115°9	116°2
116°0	116°2
116°1	116°0
116°2	115°8
115°2	115°8
116°2	116°0

AL FORCE.

620°4	620°8
620°4	621°0
620°6	621°0
620°8	620°8
620°6	621°8
620°9	622°1
620°4	622°8
620°0	620°5
620°6	621°5
620°6	622°8
620°4	623°4
620°4	622°7
41°3	39°6

FORCE.

175°5	178°0
175°3	178°0
176°8	177°8
176°8	177°8
176°8	177°8
177°8	177°8
177°9	177°8
178°0	178°0
178°0	178°3
178°0	178°3
178°0	178°3
178°0	178°3
41°2	40°2

decreasing Declination.

Weather.

D.	H.	M.	Barometer at 32°.	Thermometers.	Wind.	Weather.				
			In.	Dry.	Wet.					
1	haze.	21	22	0	29°993	1°0	0°6	N.	Moderate, with gusts.	Cloudy, with haze.
1	haze.	23	0	30°039	-1°2	-0°7	N.N.W.	Moderate.	Clear, with haze.	
1	haze.	22	0	0	30°078	-0°7	-1°1	N.N.W.	Moderate.	Clear, with cum.
		1	0	30°120	-1°4	-1°9	N.N.W.	Moderate, with gusts.	Clear; cir-cum and haze.	
		2	0	30°144	0°0	-1°1	N.N.W.	—	Clear; cir-cum.	
		3	0	30°154	2°7	2°8	N.N.W.	—	Clear; cum-strat.	
		4	0	30°161	6°4	5°7	N.N.W.	Brisk, with gusts.	Clear; cir-cum.	
		5	0	30°167	9°5	9°1	N.N.W.	Brisk, with gusts.	Cloudy, with haze.	
		6	0	30°157	12°4	12°4	N.W. by N.	Brisk, with gusts.	Cloudy, with haze.	
		7	0	30°135	16°6	15°8	N.W. by N.	Brisk.	Clear; cir-cum.	
		8	0	30°147	18°8	16°2	N.N.W.	Moderate, with gusts.	Clear; cir-cum.	
		9	0	30°184	18°9	16°7	N.W.	Brisk.	Clear; cir-cum. and haze.	

MAGNETICAL OBSERVATIONS.												January 21st and 22nd.	
DECLINATION.				Angular Value of one Scale Division = 0°.721.									
21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
116°0	116°6	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°0	110°4	
115°8	116°9	116°7	118°4	119°2	120°8	120°5	119°0	116°0	112°0	108°8	108°2	110°8	
115°8	117°0	116°2	118°8	119°9	120°8	120°6	118°1	116°0	111°7	108°6	108°7	111°0	
116°1	116°9	116°4	119°0	119°8	120°8	120°4	118°2	116°4	111°0	108°4	108°9	111°2	
116°0	116°8	116°1	119°0	120°0	120°4	120°4	118°1	115°2	111°0	108°0	109°0	111°7	
116°2	116°4	116°2	119°2	120°0	121°0	120°2	117°9	115°0	110°7	108°1	109°1	111°8	
116°4	116°5	116°8	119°0	120°2	121°0	120°3	117°5	115°2	110°2	108°0	109°3	112°0	
116°6	116°5	117°2	119°4	120°2	120°6	120°1	117°2	114°7	110°0	108°0	109°5	112°1	
116°8	116°9	117°4	119°3	120°3	120°8	120°1	117°0	114°2	109°7	108°0	109°8	112°2	
117°0	117°0	117°8	119°8	120°7	120°8	120°0	117°0	114°0	109°4	108°0	110°0	112°3	
116°8	117°0	117°8	120°1	120°3	120°8	119°5	116°8	113°2	109°2	107°9	110°2	112°8	
116°7	117°0	117°9	119°9	120°3	120°4	119°5	116°8	112°7	109°0	108°2	110°3	113°0	

HORIZONTAL FORCE.					Increase, in Scale Divisions, corresponding to 1° decrease of temperature, 1°63.							
622°6	622°8	621°1	624°9	624°3	624°0	618°5	613°1	608°2	608°4	616°0	624°8	634°5
621°8	622°4	624°4	625°0	624°0	623°2	616°2	613°5	607°2	609°2	616°8	625°8	636°0
621°8	622°0	621°9	621°7	625°0	623°2	617°5	612°0	607°6	610°0	617°0	625°9	635°1
621°6	622°4	621°6	625°2	625°0	623°0	616°5	611°5	607°4	609°7	618°7	626°7	635°0
623°2	622°5	625°0	625°6	625°0	622°4	617°5	611°4	607°0	610°3	619°7	627°9	635°4
622°8	622°4	625°2	625°7	625°0	621°1	615°5	610°9	607°2	610°3	620°1	628°5	636°3
622°2	622°0	625°7	625°4	625°0	621°0	616°0	610°7	606°5	614°0	621°2	630°0	637°2
622°2	623°4	625°7	625°5	625°0	620°0	614°5	610°3	607°0	615°1	621°2	630°8	637°7
621°4	623°6	625°8	626°0	624°8	620°8	615°0	608°5	606°7	614°0	621°9	631°3	638°0
621°4	623°8	626°4	626°0	624°8	620°0	611°5	609°5	607°2	613°2	622°0	631°6	638°0
622°1	623°0	625°3	625°7	624°8	620°0	613°9	608°4	608°0	614°5	622°8	632°8	637°7
622°1	623°5	624°9	625°5	624°5	618°5	613°0	608°5	608°2	615°6	623°1	633°9	638°7
38°4	38°0	37°0	37°0	37°1	36°6	37°5	38°0	37°5	37°0	37°2	37°6	38°7

VERTICAL FORCE.					Increase in Scale Divisions, corresponding to 1° decrease of temperature, 1°80.							
179°1	180°2	180°5	181°7	180°2	183°0	182°3	182°8	184°6	187°5	188°1	187°2	186°2
179°1	179°9	180°8	181°7	180°2	183°7	182°3	182°8	184°6	187°5	187°4	187°3	186°0
179°1	179°9	181°2	180°9	180°3	183°7	182°3	182°8	184°8	187°5	187°4	187°0	185°8
180°4	180°2	181°2	180°9	180°3	183°2	182°3	182°8	185°3	187°6	188°1	187°0	185°5
180°4	180°2	181°2	180°9	180°3	183°2	182°3	183°4	185°3	187°6	188°1	187°7	185°5
180°4	179°9	181°2	180°9	180°3	182°8	182°3	183°4	185°4	187°6	187°7	186°0	185°5
180°4	180°5	181°2	180°7	180°7	182°8	182°3	183°8	185°4	187°6	188°1	186°5	185°5
180°4	180°5	181°2	180°7	180°7	182°3	182°3	183°8	185°8	187°6	187°0	186°2	185°4
179°3	179°9	181°0	180°9	183°2	182°3	182°3	183°8	185°8	186°5	187°0	186°4	185°1
179°3	179°9	181°0	180°4	183°2	182°3	182°3	183°9	187°2	187°4	187°0	186°0	184°9
178°6	179°9	181°7	180°4	182°2	182°3	182°8	183°9	186°8	187°3	187°4	186°0	184°7
178°6	180°5	181°7	180°3	182°2	182°3	182°8	184°6	187°0	188°1	186°3	186°2	184°7
39°7	39°3	38°8	38°3	37°7	39°1	38°6	39°1	38°1	37°6	37°7	37°9	38°6

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.											
Mean Gettingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.			
21	22	0	29°993	1°0	0°6	—	N.	Moderate, with gusts.	Cloudy, with haze.		
23	0	30°039	—1°2	—0°7	—	—	N.N.W.	Moderate.	Clear, with haze.		
22	0	0	30°078	—0°7	—1°1	—	N.N.W.	Moderate.	Clear, with cum.		
	1	0	30°120	—1°4	—1°9	—	N.N.W.	Moderate, with gusts.	Clear; cir-cum and haze.		
	2	0	30°144	0°0	—1°1	—	N.N.W.	—	Clear; cir-cum.		
	3	0	30°154	2°7	2°8	—	N.N.W.	—	Clear; cum-strat.		
	4	0	30°161	6°4	5°7	—	N.N.W.	Brisk, with gusts.	Clear; cir-cum.		
	5	0	30°167	9°5	9°1	—	N.N.W.	Brisk, with gusts.	Cloudy, with haze.		
	6	0	30°157	12°4	12°4	—	N.W. by N.	Brisk, with gusts.	Cloudy, with haze.		
	7	0	30°135	16°6	15°8	—	N.W. by N.	Brisk, with gusts.	Clear; cir-cum.		
	8	0	30°147	18°8	16°2	—	N.N.W.	Moderate, with gusts.	Clear; cir-cum.		
	9	0	30°184	18°9	16°7	—	N.W.	Brisk.	Clear; cir-cum. and haze.		

February 27th and 28th.												MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.											
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.											
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.										
0	0	110° 8	112° 8	113° 0	113° 4	117° 4	113° 8	114° 0	114° 4	113° 7	112° 4	112° 0	112° 0										
5	0	111° 0	112° 6	113° 0	113° 8	117° 0	113° 8	114° 0	114° 9	114° 6	112° 9	112° 0	112° 0										
10	0	111° 0	112° 8	113° 2	114° 0	116° 6	113° 8	114° 2	115° 1	114° 8	113° 0	112° 4	112° 4										
15	0	111° 0	113° 0	113° 4	115° 0	115° 0	114° 0	115° 0	115° 8	114° 0	113° 9	112° 4	112° 4										
20	0	111° 2	113° 0	113° 7	114° 8	113° 4	113° 5	115° 3	116° 1	114° 0	114° 2	113° 1	113° 1										
25	0	111° 2	113° 2	113° 8	114° 4	115° 2	114° 2	115° 2	116° 1	114° 0	113° 0	113° 2	113° 2										
30	0	111° 2	112° 8	114° 0	114° 6	115° 4	113° 8	116° 9	115° 7	114° 0	112° 2	114° 3	114° 3										
35	0	111° 7	113° 0	113° 8	114° 4	115° 0	113° 4	115° 8	115° 9	113° 7	112° 2	114° 8	114° 8										
40	0	111° 8	113° 2	113° 7	114° 4	115° 6	113° 6	115° 0	116° 0	113° 0	111° 9	114° 7	114° 7										
45	0	112° 2	113° 4	113° 2	118° 6	115° 4	113° 8	114° 2	115° 8	111° 0	111° 5	114° 7	114° 7										
50	0	112° 3	113° 8	114° 0	122° 0	115° 0	113° 4	114° 3	114° 2	110° 8	111° 5	114° 5	114° 5										
55	0	112° 8	113° 4	114° 2	119° 9	111° 0	113° 9	114° 3	113° 1	111° 2	111° 8	114° 8	114° 8										

M. S.		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.				
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.				
2	0	622° 0	623° 2	623° 0	623° 4	624° 2	625° 4	619° 8	619° 6	618° 4	622° 4	622° 1	622° 1			
7	0	622° 4	623° 4	623° 2	624° 2	625° 0	625° 2	620° 4	619° 0	619° 0	622° 2	622° 8	622° 8			
12	0	622° 0	623° 0	623° 4	623° 4	626° 0	624° 0	620° 3	618° 4	618° 0	623° 0	622° 8	622° 8			
17	0	623° 2	622° 6	623° 4	622° 6	625° 8	625° 4	620° 6	618° 2	621° 0	623° 0	623° 0	623° 0			
22	0	623° 6	623° 0	623° 6	622° 6	625° 4	625° 2	620° 1	618° 0	621° 8	623° 0	623° 0	623° 0			
27	0	622° 2	622° 8	623° 8	622° 5	623° 8	623° 8	619° 0	618° 8	621° 3	622° 7	623° 2	623° 2			
32	0	621° 8	623° 0	624° 0	624° 0	624° 2	623° 0	619° 9	617° 0	621° 9	622° 9	623° 0	623° 0			
37	0	622° 0	623° 2	621° 0	623° 2	624° 2	622° 2	620° 8	616° 4	622° 4	621° 9	623° 0	623° 0			
42	0	621° 2	623° 2	621° 8	623° 2	625° 8	621° 4	620° 6	617° 4	622° 4	621° 2	622° 0	622° 0			
47	0	621° 2	624° 0	622° 0	625° 0	626° 0	620° 8	621° 0	618° 8	621° 4	621° 9	621° 8	621° 8			
52	0	622° 0	623° 8	624° 0	627° 4	625° 8	620° 2	620° 0	618° 6	621° 0	622° 0	621° 0	621° 0			
57	0	621° 8	623° 8	625° 2	627° 2	625° 2	619° 0	619° 0	618° 7	621° 2	622° 2	621° 0	621° 0			

Thermometer		38° 8	38° 2	37° 8	38° 8	40° 0	40° 2	40° 0	40° 0	40° 1	39° 8	38° 9
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M. S.		One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.				
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.				
3	0	185° 9	185° 2	185° 0	182° 7	180° 5	179° 7	181° 4	180° 5	180° 3	179° 4	179° 0	179° 0			
8	0	185° 9	185° 3	185° 9	182° 7	180° 5	179° 7	181° 4	179° 7	181° 3	179° 4	178° 9	178° 9			
13	0	186° 0	185° 1	183° 9	182° 7	180° 5	179° 7	180° 9	179° 7	181° 1	179° 3	178° 9	178° 9			
18	0	185° 6	185° 0	183° 7	182° 7	180° 5	179° 7	181° 6	180° 3	180° 9	179° 3	178° 9	178° 9			
23	0	185° 7	184° 9	183° 6	182° 2	180° 5	179° 7	181° 3	180° 3	180° 8	178° 8	178° 9	178° 9			
28	0	185° 6	185° 0	184° 6	182° 2	180° 5	179° 7	180° 7	180° 5	180° 8	178° 6	178° 9	178° 9			
33	0	185° 5	185° 0	183° 6	182° 2	180° 5	179° 9	181° 5	180° 3	180° 4	178° 7	179° 0	179° 0			
38	0	185° 3	185° 0	182° 8	181° 9	180° 7	179° 4	181° 5	179° 4	180° 0	178° 9	179° 0	179° 0			
43	0	185° 5	185° 0	182° 7	181° 9	180° 7	180° 4	180° 3	179° 7	180° 4	178° 9	179° 4	179° 4			
48	0	185° 0	185° 0	182° 7	181° 9	180° 4	180° 2	180° 3	180° 8	179° 8	179° 1	179° 5	179° 5			
53	0	185° 0	185° 0	182° 7	181° 9	180° 4	180° 4	180° 5	180° 8	179° 8	179° 1	179° 7	179° 7			
58	0	185° 0	185° 0	182° 7	181° 4	180° 4	180° 4	180° 5	180° 3	179° 4	179° 1	179° 7	179° 7			

Thermometer		38° 3	38° 1	38° 3	39° 0	40° 0	40° 0	40° 0	40° 0	40° 2	40° 3	40° 4	40° 0
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
					Dry.	Wet.	Direction.	Force.			
D.	H.	M.	In.	°	°						
27	10	0	30° 009	14° 5	13° 7		S.W.	Very light.	Cloudy ; cir.-cum. and haze.		
	11	0	30° 008	13° 0	11° 8		S.W.	Very light.	Cloudy ; cir.-cum. and haze.		
	12	0	29° 997	11° 8	11° 7		S.W.	Very light.	Cloudy ; slight snow.		
	13	0	29° 974	11° 1	12° 0		N.W.	Very light.	Cloudy ; cir.-cum.		
	14	0	29° 909	11° 1	10° 7		N. by W.	Very light.	Cloudy, with haze.		
	15	0	29° 903	11° 0	10° 7		N. by W.	Very light.	Cloudy ; cir.-cum. and haze.		
	16	0	29° 883	10° 7	10° 2		N.N.E.	Very light.	Cloudy ; haze and snow.		
	17	0	29° 851	10° 5	10° 5		N.N.E.	Very light.	Cloudy ; cir.-cum.		
	18	0	29° 827	10° 7	10° 5		N.E. by N.	Very light.	Hazy ; occasional snow.		
	19	0	29° 801	11° 0	10° 5		N.N.E.	Very light.	Hazy ; occasional snow.		
	20	0	29° 789	11° 1	10° 8		N.N.E.	Light.	Hazy ; cir.-cum.		
	21	0	29° 785	11° 0	10° 8		N.N.E.	Moderate.	Hazy ; cir.-cum. and haze.		

* At 28° 10', Thermometer of H. F., 41° 4'; of V. F., 40° 8'.

MAGNETICAL OBSERVATIONS.

February 27th and 28th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
115° 4	114° 2	116° 0	116° 6	119° 0	121° 0	120° 6	117° 2	111° 2	108° 0	107° 0	107° 5	109° 3
112° 4	114° 6	115° 5	116° 6	119° 0	121° 0	120° 2	117° 0	111° 0	108° 0	107° 0	107° 8	109° 7
112° 9	114° 7	115° 9	117° 0	119° 2	121° 0	120° 0	116° 8	110° 9	108° 1	107° 4	108° 0	109° 8
113° 0	114° 8	116° 0	117° 0	119° 3	120° 8	120° 0	116° 4	110° 3	107° 9	107° 1	107° 9	110° 0
113° 9	114° 2	115° 6	117° 0	119° 7	120° 6	119° 8	116° 2	109° 8	108° 0	106° 9	108° 2	110° 0
114° 2	114° 8	115° 4	117° 1	119° 2	121° 0	119° 3	115° 9	110° 0	107° 4	107° 0	108° 6	110° 5
113° 8	115° 0	115° 9	117° 8	119° 8	121° 2	119° 8	115° 1	110° 0	107° 7	107° 0	108° 8	111° 0
113° 6	115° 0	115° 9	118° 0	119° 7	121° 0	119° 2	114° 2	109° 2	108° 0	107° 1	108° 3	111° 0
113° 4	115° 0	116° 0	118° 3	120° 0	121° 0	119° 2	114° 4	108° 4	107° 3	107° 2	108° 7	111° 0
113° 0	116° 0	116° 0	118° 8	120° 2	121° 0	119° 2	113° 5	108° 0	107° 0	107° 2	109° 0	111° 1
111° 9	116° 0	116° 0	118° 8	120° 4	121° 0	118° 6	113° 0	108° 0	107° 2	107° 2	109° 0	111° 8
111° 5	114° 7	116° 2	119° 0	121° 0	120° 6	117° 6	112° 0	107° 8	107° 1	107° 3	109° 2	112° 0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

621° 0	621° 3	622° 0	622° 1	620° 0	616° 6	613° 2	608° 1	604° 8	606° 3	610° 0	613° 8	618° 0
622° 4	621° 0	622° 0	623° 0	620° 0	616° 4	612° 2	607° 6	603° 0	606° 1	610° 8	614° 0	618° 0
622° 2	621° 0	621° 2	623° 0	619° 6	616° 4	612° 0	607° 1	605° 0	607° 0	610° 6	613° 4	617° 0
623° 0	621° 5	621° 6	623° 0	619° 4	616° 6	611° 2	607° 0	606° 0	608° 1	610° 2	612° 0	617° 5
623° 0	622° 0	622° 2	623° 0	620° 3	616° 3	610° 4	606° 4	605° 8	608° 0	610° 0	613° 0	617° 0
622° 7	622° 0	622° 0	623° 0	620° 6	615° 6	610° 8	605° 0	604° 6	607° 8	611° 9	613° 6	616° 8
622° 9	622° 0	622° 5	622° 0	619° 1	615° 0	610° 2	605° 4	604° 6	609° 0	611° 8	615° 0	617° 0
621° 9	621° 2	622° 2	622° 0	619° 6	615° 2	610° 0	605° 0	605° 0	608° 4	612° 0	617° 2	617° 0
621° 9	622° 0	622° 8	622° 0	618° 8	614° 4	606° 8	604° 0	606° 7	608° 8	612° 0	617° 0	617° 0
621° 2	621° 4	622° 2	622° 0	618° 0	614° 3	609° 8	604° 3	607° 0	608° 2	613° 7	617° 0	617° 5
620° 1	622° 0	622° 0	621° 0	618° 2	613° 8	608° 8	604° 2	606° 4	609° 2	613° 6	617° 0	617° 6
622° 2	622° 0	622° 0	621° 0	616° 4	613° 4	608° 3	604° 0	606° 6	609° 6	613° 4	618° 0	617° 0

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.

179° 7	181° 5	182° 1	183° 0	181° 7	185° 2	185° 6	185° 2	184° 7	183° 7	183° 3	182° 4	182° 7
179° 7	181° 7	182° 1	183° 0	181° 7	185° 1	185° 2	185° 5	184° 3	183° 7	183° 0	182° 7	182° 7
179° 7	181° 4	182° 1	183° 0	181° 8	184° 9	185° 4	184° 9	184° 3	183° 7	183° 0	182° 7	182° 7
181° 0	181° 4	182° 1	183° 0	181° 6	185° 2	185° 4	184° 9	184° 5	183° 7	183° 0	182° 2	182° 7
181° 1	181° 4	182° 1	183° 6	181° 8	185° 1	185° 4	184° 6	184° 8	183° 7	183° 0	182° 2	182° 3
181° 2	181° 6	182° 1	183° 6	181° 7	185° 5	185° 1	184° 4	184° 5	183° 5	183° 0	182° 2	182° 3
181° 2	181° 4	182° 1	183° 6	181° 7	185° 6	185° 5	185° 0	184° 5	183° 5	183° 0	182° 2	182° 3
181° 2	181° 4	182° 1	183° 6	181° 9	185° 5	185° 0	184° 7	183° 4	182° 8	182° 2	182° 3	182° 3
181° 5	181° 3	182° 1	183° 6	181° 9	185° 6	184° 9	184° 5	184° 3	183° 5	182° 8	182° 2	182° 3
181° 5	181° 3	182° 5	183° 6	181° 9	185° 6	184° 9	184° 2	184° 3	183° 5	182° 8	182° 6	182° 3
181° 5	181° 3	182° 5	183° 6	185° 0	185° 6	185° 0	184° 6	184° 3	183° 3	182° 8	182° 5	182° 3
181° 6	181° 3	182° 5	184° 7	185° 2	185° 6	185° 2	184° 5	184° 0	183° 3	182° 4	182° 5	182° 3

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.	Weather.	
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
27	22	0	29°7.57	11°8	11°0	N.E. by N.	Moderate.	Cloudy, with haze.
	23	0	29°7.31	11°6	10°5	N.E.	Moderate.	Cloudy, with occasional snow.
28	0	0	29°7.27	11°3	10°5	N.E.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.
	1	0	29°7.27	11°8	10°8	N.E. by N.	Moderate.	Cloudy; cir.-cum.
	2	0	29°7.40	12°4	11°4	N.E. by N.	Moderate.	Cloudy; cir.-cum.
	3	0	29°7.20	14°9	14°1	N.E.	Moderate, with gusts.	Fair, with cir.
	4	0	29°7.24	16°7	15°8	N.E. by E.	Moderate, with gusts.	Fair, with cir.
	5	0	29°7.14	18°3	17°3	N.E.	Moderate.	Fair, with cir. and cum.
	6	0	29°7.08	18°5	17°5	N.E.	Moderate, with gusts.	Cloudy, with cum.
	7	0	29°6.95	17°7	17°1	N.E. by E.	Moderate, with gusts.	Cloudy; cir.-cum.
	8	0	29°6.92	18°1	17°0	E.N.E.	Moderate, with gusts.	Cloudy; occasional s. w.
	9	0	29°6.94	19°4	17°5	E.N.E.	Moderate.	Cloudy; cir.-cum. and haze.

March 18th and 19th.												MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.											
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .											
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
0	0	108° 9	111° 2	112° 2	126° 6	110° 1	112° 8	113° 0	113° 2	113° 9	114° 0	114° 0											
5	0	109° 0	111° 4	112° 4	124° 0	110° 8	112° 9	113° 0	113° 2	114° 0	113° 9	114° 2											
10	0	109° 8	111° 8	113° 8	120° 3	111° 2	113° 0	113° 0	113° 5	114° 0	114° 9	114° 6											
15	0	110° 2	112° 0	118° 8	116° 8	111° 6	113° 0	113° 0	113° 9	114° 0	114° 1	115° 1											
20	0	111° 6	112° 0	125° 4	115° 0	112° 0	112° 9	113° 1	113° 8	114° 0	114° 1	114° 1											
25	0	111° 0	112° 0	125° 6	114° 6	112° 0	112° 9	113° 1	113° 8	114° 0	114° 2	113° 1											
30	0	110° 4	112° 0	124° 8	113° 7	112° 2	112° 8	113° 1	113° 8	114° 0	114° 3	113° 2											
35	0	110° 8	111° 6	126° 4	112° 0	112° 1	113° 0	113° 2	113° 7	114° 0	114° 3	113° 9											
40	0	111° 4	111° 4	128° 6	111° 2	112° 3	113° 0	113° 2	113° 5	114° 0	114° 5	114° 1											
45	0	111° 0	112° 2	128° 8	110° 7	112° 2	113° 0	113° 2	113° 9	114° 0	113° 0	114° 6											
50	0	111° 2	112° 0	128° 9	110° 2	112° 7	113° 2	113° 2	113° 8	114° 0	113° 3	115° 3											
55	0	111° 2	112° 6	128° 6	110° 2	112° 6	113° 0	113° 4	113° 8	114° 0	113° 8	115° 3											
One Scale Division = 1/600087 parts of the H.F.																							
HORIZONTAL FORCE.																							
M.	S.	600° 9	607° 0	600° 8	595° 0	602° 8	603° 4	603° 5	601° 8	602° 0	602° 0	600° 0	600° 0	601° 5	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
2	0	600° 9	607° 0	600° 8	595° 0	602° 8	603° 4	603° 5	601° 8	602° 0	602° 0	600° 0	600° 0	601° 5	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
7	0	601° 8	607° 2	599° 6	595° 0	603° 0	603° 0	603° 0	602° 0	602° 0	602° 0	601° 5	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
12	0	601° 6	608° 8	600° 0	594° 2	602° 8	603° 7	602° 9	602° 0	602° 0	601° 5	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
17	0	603° 2	607° 2	597° 6	593° 1	602° 4	604° 0	603° 0	602° 2	602° 2	601° 0	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
22	0	606° 6	606° 8	597° 6	593° 0	602° 4	603° 8	602° 8	602° 7	601° 4	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
27	6	607° 0	607° 5	597° 8	595° 6	603° 0	603° 4	602° 4	602° 7	601° 4	601° 0	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
32	0	605° 4	606° 8	595° 2	597° 2	603° 0	603° 0	602° 5	601° 8	601° 2	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
37	0	607° 0	606° 8	590° 7	599° 6	603° 0	603° 0	602° 0	602° 0	601° 0	601° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0		
42	0	607° 4	603° 8	592° 0	601° 8	603° 6	603° 2	602° 0	601° 4	600° 9	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0		
47	0	606° 8	602° 7	593° 0	602° 0	603° 0	603° 2	602° 1	601° 4	600° 8	601° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0		
52	0	607° 2	601° 8	592° 8	601° 9	603° 2	603° 4	602° 0	601° 6	600° 8	601° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0	602° 0		
57	0	605° 4	602° 0	594° 2	603° 0	603° 4	604° 0	602° 0	601° 6	601° 8	601° 2	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0	601° 0		
Thermometer		52° 4	52° 2	52° 0	52° 7	53° 0	53° 3	53° 9	54° 0	54° 0	53° 6	53° 5											
One Scale Division = 1/600066.																							
VERTICAL FORCE.																							
M.	S.	163° 4	164° 4	164° 7	161° 2	156° 5	155° 9	156° 2	156° 2	156° 2	153° 8	154° 4	154° 4	154° 4	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7		
3	0	163° 4	164° 4	164° 7	161° 2	156° 5	155° 9	156° 2	156° 2	156° 2	153° 8	154° 4	154° 4	154° 4	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7		
8	0	164° 2	164° 6	165° 1	159° 1	156° 5	156° 4	158° 1	156° 2	156° 2	153° 7	154° 4	154° 4	154° 4	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7		
13	0	164° 2	164° 6	165° 1	158° 1	156° 0	156° 2	158° 8	155° 1	156° 2	153° 7	154° 4	154° 4	154° 4	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7		
18	0	164° 2	164° 7	165° 5	158° 3	156° 0	156° 2	155° 8	155° 1	156° 3	153° 7	154° 4	154° 4	154° 4	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7	153° 7		
23	0	164° 3	164° 7	164° 2	158° 7	156° 0	155° 6	155° 8	155° 1	156° 3	153° 9	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
28	0	164° 8	164° 7	164° 2	158° 6	156° 4	155° 6	156° 9	155° 1	154° 4	153° 9	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
33	0	164° 8	164° 7	163° 3	158° 0	156° 3	156° 2	156° 9	155° 5	154° 6	153° 9	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
38	0	164° 1	165° 2	161° 9	158° 0	156° 1	156° 2	156° 2	155° 5	154° 1	153° 9	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
43	0	164° 1	165° 2	161° 7	158° 0	156° 1	155° 7	156° 2	155° 5	154° 1	153° 9	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
48	0	164° 1	165° 2	161° 9	157° 5	156° 4	155° 7	156° 2	155° 6	154° 1	154° 4	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
53	0	164° 1	164° 8	160° 9	157° 5	156° 0	156° 3	156° 2	155° 9	154° 1	154° 4	154° 4	154° 4	154° 4	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
58	0	164° 4	164° 8	161° 2	156° 9	155° 9	156° 3	156° 2	155° 9	153° 8	154° 4	156° 2	156° 2	156° 2	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9	153° 9		
Thermometer		51° 1	51° 1	51° 1	53° 5	54° 1	54° 0	54° 3	54° 1	53° 9	54° 4	54° 3											
Increasing Numbers denote decreasing Westerly Declination.																							
METEOROLOGICAL OBSERVATIONS.																							
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.														
					Dry.	Wet.	Direction.	Force.															
D.	H.	M.	In.	°	°																		
18	10	0	29° 752	39° 5	35° 3	E.	Very light.	Cloudy; cir.-cum. and cum.-strat.															
11	0	0	29° 754	37° 6	34° 0	E.	Very light.	Cloudy; cir.-cum. and cum.-strat.															
12	0	0	29° 750	35° 1	32° 1	E. by N.	Very light.	Cloudy; cir.-cum. and strat.															
13	0	0	29° 735	33° 6	30° 4	E. by N.	Very light.	Cloudy; cir.-cum. and haze.															
14	0	0	29° 736	32° 4	29° 3	E.N.E.	Very light.	Generally cloudy, with strat.															
15	0	0	29° 716	33° 5	30° 2	N.E.	Very light.	Cloudy; cir.-cum. and cir.-strat.															
16	0	0	29° 715	33° 9	30° 1	N.E.	Very light.	Cloudy; cir.-cum. and strat.															
17	0	0	29° 720	33° 3	29° 4	N.E. by N.	Very light.	Cloudy; cir.-strat. and haze.															
18	0	0	29° 722	32° 9	29° 2	N.E. by N.	Very light.	Cloudy; cir.-strat. and haze.															
19	0	0	29° 715	34° 6	31° 2	N.N.E.	Very light.	Cloudy; cir.-cum. and strat.															
20	0	0	29° 690	34° 6	30° 7	—	Calm.	Cloudy; cir.-cum. and strat.															
21	0	0	29° 681	34° 1	31° 7	—	Calm.	Cloudy; cir.-cum. and haze.															

* At 19^h 10^m, Thermometer of H.F., 56° 3; of V.F., 56° 2.

N.	19h.	20h.
Sc. Div.	Sc. Div.	Sc. Div.
114°0	114°0	
113°9	114°2	
114°9	114°6	
114°1	115°1	
114°1	114°1	
114°2	113°1	
114°3	113°2	
114°3	113°9	
114°5	114°1	
113°0	114°6	
113°3	115°3	
113°8	115°3	

FORCE.

602°0	600°0
602°0	601°5
601°5	601°2
601°0	601°2
601°0	601°0
601°0	601°2
601°2	601°0
601°0	602°0
602°0	602°0
601°0	602°0
601°0	602°0
601°2	601°0

FORCE.

153°8	154°4
153°7	154°4
153°7	154°4
153°7	154°4
153°9	154°4
153°9	154°4
153°9	155°0
153°9	155°2
154°4	155°8
154°4	155°8
154°4	156°2

g Westerly Declination,

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MAGNETICAL OBSERVATIONS.

March 18th and 19th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
114°8	115°0	114°2	115°0	117°6	120°2	118°2	118°1	114°0	110°4	108°2	107°0	107°3
114°6	114°8	114°2	115°2	117°8	121°3	118°2	117°7	114°1	110°2	108°0	107°0	107°2
114°1	114°2	114°6	115°3	118°6	120°2	118°2	117°2	115°6	110°0	109°0	107°2	107°4
114°1	114°2	114°7	115°4	118°2	120°0	119°9	116°5	114°3	109°8	108°0	107°2	107°8
114°1	114°3	114°3	116°0	118°4	120°2	119°7	116°3	114°0	109°5	107°0	107°0	107°0
115°0	114°8	114°4	116°0	119°6	120°4	119°6	115°9	114°0	109°0	107°0	107°4	107°8
114°8	114°8	114°4	117°2	119°6	120°4	119°8	113°2	112°9	108°2	107°0	107°0	107°8
115°0	114°2	114°6	116°8	119°4	120°4	119°2	116°0	112°0	108°0	107°2	107°4	107°8
114°8	114°2	114°4	117°2	119°0	119°2	118°9	116°6	111°8	108°1	107°2	107°8	108°8
115°0	114°0	114°3	118°0	119°8	119°2	119°0	116°0	111°4	108°0	106°8	107°6	109°2
115°0	114°5	114°6	117°8	119°8	118°4	118°2	116°1	110°8	108°0	107°0	107°8	109°0
114°7	114°8	114°6	118°5	120°0	117°6	118°2	115°0	110°8	108°0	107°2	108°0	109°2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

600°0	600°0	601°0	600°0	598°0	592°8	585°0	583°4	581°8	578°0	578°5	583°4	589°8
600°0	601°5	601°4	600°3	597°0	592°0	583°8	585°2	581°8	577°0	579°5	583°4	591°3
600°0	601°7	600°6	600°4	597°4	593°7	585°6	585°0	581°0	577°2	580°0	584°7	592°4
600°8	601°4	600°8	600°6	597°2	593°2	584°5	585°0	578°2	574°5	581°0	585°0	593°2
601°0	601°4	600°4	601°6	597°0	592°0	586°4	584°0	579°0	573°6	582°0	585°4	599°2
601°0	600°6	600°8	601°8	598°2	592°0	585°6	582°1	578°0	575°5	582°5	587°0	596°8
601°0	600°4	600°6	600°0	595°4	592°0	584°0	581°5	578°0	574°5	583°0	584°8	595°8
600°0	601°6	601°0	600°6	596°0	590°8	584°0	582°0	578°2	575°5	583°0	587°4	596°0
600°0	601°4	600°2	599°2	595°4	587°8	582°0	582°4	578°0	576°0	581°3	587°2	594°7
600°2	601°6	599°8	601°0	595°2	590°0	583°8	582°2	577°0	578°3	580°5	585°7	590°0
601°0	601°6	600°0	597°7	594°2	589°4	583°8	579°9	578°2	577°0	581°4	587°4	590°7
600°0	601°8	600°3	598°8	593°4	586°6	585°0	580°5	577°8	577°0	581°6	588°2	591°2
53°2	53°0	53°5	53°5	53°0	52°6	53°4	54°0	55°0	55°2	56°0	56°4	56°5*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.

156°2	156°5	155°2	156°7	155°5	159°7	159°3	158°6	156°3	155°0	154°9	153°9	154°3
156°9	156°5	155°3	156°6	156°1	159°6	158°7	158°6	156°5	155°0	154°9	153°9	154°4
156°9	156°5	155°4	156°5	156°1	159°9	159°2	158°3	156°5	154°5	154°9	154°0	154°3
156°9	156°5	155°4	156°5	157°6	159°9	159°2	158°3	155°8	154°5	154°9	154°5	154°5
156°9	156°5	155°4	156°5	157°6	159°9	159°6	158°3	156°0	154°5	154°9	154°2	156°0
156°9	156°4	155°4	156°5	158°3	159°9	159°3	157°3	156°0	154°8	154°9	154°2	156°0
156°9	156°4	155°7	156°5	158°8	159°7	159°3	157°1	155°6	154°8	154°9	154°2	155°1
156°9	156°6	155°5	156°0	158°8	159°7	158°8	157°1	156°0	154°8	154°6	154°2	155°2
156°9	156°6	155°4	156°0	159°3	159°4	158°7	157°1	155°2	154°8	153°7	154°2	154°9
156°9	156°5	156°5	156°1	159°3	159°6	158°7	156°3	155°2	154°9	153°8	154°3	154°9
156°9	156°5	156°5	154°8	159°3	159°6	158°6	156°3	155°5	154°9	153°8	154°3	156°0
156°9	156°5	156°7	155°5	159°6	159°3	158°6	156°3	155°5	154°9	153°9	154°3	154°7
53°8	53°5	53°5	53°3	53°3	53°1	53°4	54°1	54°3	54°9	55°5	55°6	56°1*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 42°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	* In.	°	°			
18 22 0	29°67.5	34°6	31°7	—	Calm.	Cloudy; cir.-cum. and haze.
23 0 0	29°69.1	35°3	32°5	—	Calm.	Cloudy; cir.-cum. and haze.
19 0 0	29°69.1	35°1	32°9	—	Calm.	Cloudy; cir.-cum. and strat.
1 0	29°69.1	36°9	33°6	N.E.	Very light.	Cloudy; strat. and haze.
2 0	29°65.4	38°3	33°2	E.N.E.	Very light.	Cloudy; strat. and haze.
3 0	29°65.7	43°0	37°0	E. by N.	Very light.	Cloudy; strat. and haze.
4 0	29°65.4	45°0	36°7	E. by N.	Very light.	Cloudy; cir.-strat. and haze.
5 0	29°63.9	46°5	39°4	E. by S.	Very light.	Cloudy; cir.-strat. and haze.
6 0	29°61.0	47°8	39°4	E.	Very light.	Cloudy; cir.-cum. and strat.
7 0	29°61.1	49°5	41°9	—	Calm.	Cloudy; cir.-cum. and strat.
8 0	29°60.2	46°7	40°2	—	Calm.	Cloudy; cir.-cum. and cir.-strat.
9 0	29°60.6	45°3	39°6	—	Calm.	Cloudy; cir.-cum. and cir.-strat.

April 22nd and 23rd.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.								DECLINATION.	
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	108° 9'	111° 9'	111° 9'	113° 0'	110° 7'	112° 6'	112° 8'	111° 9'	113° 0'	113° 6'
5	0	108° 8'	112° 0'	111° 8'	113° 8'	110° 9'	112° 2'	112° 8'	111° 2'	113° 0'	113° 6'
10	0	110° 0'	112° 2'	112° 2'	114° 7'	110° 4'	112° 1'	112° 7'	111° 8'	113° 0'	113° 8'
15	0	110° 0'	112° 6'	112° 0'	114° 4'	109° 2'	112° 0'	112° 9'	112° 0'	113° 0'	113° 8'
20	0	109° 8'	112° 8'	112° 0'	113° 8'	111° 0'	112° 2'	112° 9'	111° 7'	113° 0'	114° 0'
25	0	110° 3'	112° 6'	111° 2'	112° 2'	111° 9'	112° 1'	112° 8'	112° 2'	112° 3'	113° 6'
30	0	110° 7'	112° 4'	110° 8'	111° 8'	112° 0'	112° 6'	112° 1'	112° 2'	113° 0'	113° 4'
35	0	110° 9'	112° 2'	110° 3'	111° 8'	111° 8'	112° 8'	112° 1'	112° 0'	113° 0'	113° 8'
40	0	111° 0'	112° 2'	111° 2'	112° 2'	112° 0'	113° 0'	112° 0'	112° 0'	112° 8'	114° 0'
45	0	111° 0'	112° 3'	111° 0'	112° 9'	112° 8'	113° 0'	112° 1'	112° 0'	113° 0'	114° 2'
50	0	111° 8'	112° 2'	115° 9'	112° 1'	112° 3'	113° 0'	112° 2'	112° 3'	113° 4'	114° 0'
55	0	111° 8'	111° 8'	113° 8'	111° 1'	112° 2'	113° 0'	112° 1'	112° 7'	113° 3'	114° 0'
One Scale Division = 0° 00087 parts of the H. F.											
HORIZONTAL FORCE.											
M.	S.										
7	0	588° 5'	593° 2'	592° 0'	586° 8'	587° 0'	585° 8'	585° 9'	586° 9'	585° 2'	586° 0'
12	0	589° 0'	593° 0'	590° 9'	567° 9'	587° 4'	585° 6'	586° 0'	585° 5'	585° 0'	585° 9'
17	0	589° 8'	593° 8'	588° 2'	570° 5'	583° 0'	586° 0'	586° 0'	585° 8'	585° 0'	586° 2'
22	0	587° 0'	600° 8'	588° 6'	575° 0'	583° 0'	586° 0'	586° 5'	586° 0'	585° 0'	586° 4'
27	0	590° 2'	601° 0'	585° 6'	578° 0'	582° 0'	586° 0'	587° 0'	585° 0'	586° 0'	586° 6'
32	0	590° 3'	600° 0'	585° 8'	579° 2'	581° 2'	585° 9'	587° 0'	586° 0'	585° 9'	586° 6'
37	0	592° 9'	598° 8'	584° 8'	579° 2'	584° 4'	586° 0'	587° 0'	586° 0'	586° 0'	586° 8'
42	0	595° 5'	599° 4'	585° 0'	579° 0'	584° 0'	586° 1'	586° 0'	586° 0'	586° 8'	586° 2'
47	0	595° 0'	596° 0'	584° 8'	581° 2'	581° 2'	586° 2'	586° 5'	586° 0'	586° 0'	586° 2'
52	0	593° 2'	591° 0'	581° 2'	588° 5'	585° 8'	586° 2'	586° 5'	586° 0'	585° 3'	586° 4'
57	0	591° 2'	591° 2'	573° 8'	589° 0'	585° 8'	586° 0'	586° 5'	585° 5'	585° 3'	587° 0'
Thermometer		60° 2'	60° 3'	60° 0'	60° 1'	60° 3'	60° 4'	59° 0'	59° 5'	59° 4'	59° 1'
One Scale Division = 0° 00063 parts of the V. F.											
VERTICAL FORCE.											
M.	S.										
3	0	206° 4'	207° 6'	209° 4'	209° 1'	202° 5'	200° 3'	200° 6'	203° 1'	203° 3'	203° 7'
8	0	206° 6'	208° 1'	209° 6'	209° 1'	202° 5'	200° 2'	201° 4'	203° 1'	203° 1'	203° 7'
13	0	206° 6'	208° 9'	210° 3'	207° 5'	202° 1'	200° 4'	201° 4'	203° 1'	203° 1'	204° 3'
18	0	206° 4'	208° 6'	210° 3'	207° 0'	201° 9'	200° 5'	201° 4'	203° 1'	203° 4'	204° 2'
23	0	206° 4'	208° 6'	210° 7'	205° 7'	200° 9'	200° 3'	202° 4'	203° 3'	203° 4'	204° 4'
28	0	206° 7'	209° 3'	210° 7'	205° 7'	200° 9'	200° 1'	202° 4'	203° 3'	203° 4'	204° 4'
33	0	207° 6'	209° 3'	210° 7'	205° 1'	201° 3'	199° 9'	202° 4'	203° 3'	203° 4'	204° 3'
38	0	207° 6'	209° 5'	211° 1'	205° 1'	200° 5'	199° 9'	202° 4'	203° 3'	203° 5'	204° 2'
43	0	207° 5'	209° 3'	211° 0'	204° 4'	200° 5'	200° 1'	203° 3'	203° 3'	203° 6'	204° 2'
48	0	208° 6'	210° 5'	211° 0'	204° 4'	200° 0'	200° 1'	203° 0'	203° 3'	203° 7'	204° 2'
53	0	207° 5'	210° 4'	210° 7'	203° 6'	200° 0'	200° 5'	203° 0'	203° 3'	203° 7'	204° 2'
58	0	207° 4'	209° 4'	210° 7'	203° 6'	200° 3'	200° 5'	203° 1'	203° 3'	203° 7'	204° 2'
Thermometer		59° 4'	59° 6'	60° 0'	60° 0'	61° 1'	61° 1'	60° 6'	60° 2'	60° 0'	60° 0'
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
			In.	°	Dry.	Wet.	Direction.	Force.			
D.	H.	M.									
22	10	0	29° 704	52° 0'	48° 2'	—	E. by S.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.		
	11	0	29° 700	48° 7'	45° 9'	—	—	Calm.	Cloudy; cir.-cum., cir.-strat., and haze.		
	12	0	29° 672	46° 8'	44° 3'	—	—	Calm.	Cloudy; cir.-cum. and haze.		
	13	0	29° 668	44° 8'	43° 0'	—	—	Calm.	Cloudy; cir.-cum. and haze.		
	14	0	29° 680	43° 8'	42° 1'	—	S.W.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.		
	15	0	29° 668	44° 2'	42° 7'	—	—	Calm.	Cloudy; cir.-cum.		
	16	0	29° 656	43° 6'	42° 8'	—	—	Calm.	Cloudy; cir.-cum.		
	17	0	29° 644	44° 6'	43° 7'	—	—	Calm.	Cloudy; cir.-cum. and haze.		
	18	0	29° 645	46° 3'	45° 1'	—	—	Calm.	Cloudy; cir.-cum., strat., and haze.		
	19	0	29° 645	46° 5'	45° 5'	—	—	Calm.	Cloudy; rain.		
	20	0	29° 652	46° 6'	44° 6'	—	—	Calm.	Cloudy; rain.		
	21	0	29° 648	46° 3'	44° 6'	—	—	Calm.	Cloudy; rain.		

* At 23^d 10^a, Thermometer of H. F., 61° 3'; of V. F., 61° 0'.

MAGNETICAL OBSERVATIONS.

April 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
137°6	114°0	115°0	115°2	116°2	118°8	119°0	120°8	116°8	111°7	105°8	102°3	101°2
137°6	114°2	115°2	115°6	116°4	119°0	120°8	116°7	111°2	105°5	102°0	101°2	103°4
137°8	114°8	115°2	115°4	117°8	119°0	121°0	119°8	116°1	111°0	105°0	102°0	101°4
137°8	114°8	115°2	115°4	118°0	118°8	121°1	119°0	116°0	110°9	104°0	102°0	101°4
137°6	114°7	115°0	116°2	118°2	118°8	120°4	118°8	115°8	109°8	101°0	102°0	101°6
137°6	114°3	115°3	116°4	118°0	119°2	120°7	119°2	115°4	109°0	103°8	102°0	102°0
137°4	114°2	115°0	116°2	118°2	119°8	120°5	118°8	115°2	108°5	103°4	102°0	102°0
137°8	114°3	115°2	116°0	118°0	119°2	121°0	118°3	114°8	108°0	103°1	102°0	102°0
11°0	111°3	115°2	116°2	118°2	119°2	122°0	118°2	114°2	107°7	103°0	101°6	102°0
14°2	114°3	115°2	116°2	118°6	119°0	122°4	118°0	113°1	107°1	102°5	101°2	102°3
11°0	114°7	115°2	116°0	118°2	118°3	121°0	117°0	112°7	107°2	102°7	101°0	102°3
14°0	114°8	115°3	116°0	119°0	119°0	120°7	117°0	112°8	106°6	102°5	101°2	102°8

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

588°2	589°4	592°2	593°8	592°6	588°0	574°2	570°5	571°4	576°1	580°8	585°0	597°8
588°3	590°2	592°8	591°0	592°8	583°8	573°4	569°8	572°0	576°0	580°6	586°2	596°4
588°2	590°0	593°2	595°4	591°2	586°0	573°4	569°0	572°0	577°0	581°0	588°2	595°2
588°5	589°2	593°2	593°6	591°8	581°7	573°5	568°7	571°0	578°0	581°4	589°0	605°6
588°6	589°0	593°2	593°8	590°4	582°2	572°0	569°2	571°0	578°0	581°6	589°4	610°2
588°4	588°4	593°2	591°2	592°0	581°0	571°6	569°6	571°0	578°6	582°2	589°0	611°8
588°3	588°2	592°0	594°0	590°8	578°8	571°3	569°4	571°0	578°8	584°2	588°2	612°2
588°6	588°4	592°2	593°4	591°8	578°4	571°0	570°0	572°0	578°8	584°0	588°2	608°4
588°5	590°5	592°2	593°6	589°8	577°2	571°0	569°0	573°0	579°0	583°6	591°8	604°8
588°5	591°0	592°4	593°0	591°0	576°8	571°4	570°0	574°0	579°7	586°0	598°4	597°4
588°7	592°2	590°0	594°7	589°0	575°8	571°2	570°8	574°2	580°6	583°0	600°0	595°5
588°5	593°4	593°4	593°5	589°0	575°0	570°5	571°0	575°0	580°5	582°8	598°2	593°8

59°6	59°7	59°8	59°6	59°5	59°7	60°0	60°8	60°7	61°0	61°2	61°2	61°3
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

204°4	204°5	201°7	202°8	202°7	203°8	202°7	202°1	200°6	199°6	199°4	200°6	202°7
204°4	205°2	202°1	202°8	201°2	203°9	202°8	201°7	200°3	199°6	199°4	200°6	202°7
204°4	205°2	202°3	202°8	203°4	204°6	202°8	201°7	200°3	199°6	199°1	200°6	202°0
204°7	205°2	202°3	202°5	203°6	204°3	203°4	201°3	199°7	199°6	199°2	201°1	201°4
204°7	205°2	202°3	202°5	201°1	203°5	203°4	201°1	199°7	199°6	199°2	201°2	201°9
204°7	205°4	202°3	202°5	201°1	203°3	202°7	201°1	199°7	199°6	199°8	201°4	205°1
204°7	203°4	202°0	202°5	204°1	203°3	202°7	201°0	199°7	199°6	199°8	201°4	205°1
204°9	202°6	202°0	202°1	203°8	203°3	201°9	200°3	199°6	199°1	199°7	201°4	204°7
204°8	201°0	202°0	202°1	204°1	202°7	202°7	200°5	199°6	199°2	200°3	201°4	204°4
204°8	201°2	202°0	202°5	204°1	202°7	202°6	200°5	199°6	198°8	200°2	202°2	202°6
204°8	201°2	202°0	202°5	204°2	202°7	202°1	200°2	199°6	198°8	200°1	202°7	202°6
204°7	201°7	202°8	202°8	204°0	202°7	202°1	200°5	199°6	199°4	200°7	202°7	202°0

59°4	60°6	60°6	60°1	59°7	59°0	59°2	60°0	60°0	60°4	60°4	60°3	60°5
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.	
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.		
22	22	0	29°653	47°5	47°0		N. by E.	Very light.	Cloudy; rain.	
22	23	0	29°651	48°1	46°2		—	Calm.	Cloudy; rain.	
23	0	0	29°639	49°5	47°7		N.N.E.	Very light.	Cloudy; rain.	
	1	0	29°650	51°3	49°8		—	Calm.	Cloudy; rain.	
	2	0	29°646	51°2	51°1		N.E. by N.	Very light.	Cloudy; rain.	
	3	0	29°654	47°7	47°0		E.S.E.	Very light.	Hazy; cir.-cum. and cir.-strat.	
	4	0	29°648	50°7	48°7		E.	Very light.	Hazy; cir.-cum. and cir.-strat.	
	5	0	29°635	52°2	49°2		E.N.E.	Moderate.	Hazy; cir.-cum.	
	6	0	29°617	54°2	50°1		N.E. by E.	Moderate.	Hazy; cir.-cum. and cir.-strat.	
	7	0	29°605	55°0	50°8		E.N.E.	Moderate.	Hazy; cir.-cum.	
	8	0	29°597	55°8	50°7		E.N.E.	Moderate.	Hazy; cir.-cum. and strat.	
	9	0	29°565	55°5	50°8		E.N.E.	Moderate.	Hazy; cir.-cum. and strat.	

May 29th and 30th.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.			
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	106° 8	109° 2	108° 2	110° 0	109° 8	110° 4	125° 6	126° 0	117° 0	115° 2
5	0	107° 0	109° 0	108° 0	109° 8	109° 8	109° 8	127° 8	124° 6	118° 2	114° 8
10	0	107° 2	109° 0	106° 8	109° 3	109° 6	110° 2	128° 0	123° 6	119° 4	114° 8
15	0	107° 8	109° 3	106° 0	108° 8	109° 7	110° 6	126° 6	123° 2	119° 6	114° 9
20	0	108° 2	109° 4	106° 3	109° 0	109° 8	112° 2	124° 8	123° 4	119° 2	115° 0
25	0	109° 0	109° 0	107° 0	109° 2	110° 2	114° 4	125° 0	123° 6	119° 0	114° 7
30	0	109° 4	108° 8	107° 6	109° 0	110° 4	118° 0	127° 8	123° 6	119° 0	114° 8
35	0	109° 8	108° 8	108° 0	109° 0	110° 0	122° 2	129° 6	121° 4	117° 8	115° 3
40	0	110° 0	108° 8	108° 2	109° 2	109° 4	128° 0	127° 6	121° 2	117° 2	115° 8
45	0	110° 0	108° 3	109° 0	109° 0	109° 8	125° 8	124° 8	120° 4	117° 0	115° 0
50	0	110° 0	108° 2	109° 7	109° 2	109° 4	124° 6	124° 2	118° 8	117° 0	115° 1
55	0	110° 0	108° 6	110° 0	109° 2	109° 7	124° 0	125° 0	118° 0	116° 2	115° 0
M.		One Scale Division = 0° 00087 parts of the H. F.						HORIZONTAL FORCE.			
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	0	582° 5	588° 0	576° 5	575° 2	578° 0	578° 2	580° 0	569° 2	569° 4	570° 4
7	0	583° 8	590° 0	574° 0	575° 0	579° 2	578° 4	581° 6	571° 2	570° 8	571° 5
12	0	583° 8	591° 0	572° 5	575° 4	577° 3	578° 0	581° 0	570° 0	572° 2	573° 2
17	0	583° 5	591° 0	572° 0	575° 7	578° 0	578° 2	581° 6	570° 0	573° 2	573° 0
22	0	591° 0	589° 0	572° 0	576° 2	577° 2	580° 2	577° 2	569° 0	572° 8	573° 5
27	0	597° 0	588° 0	573° 4	576° 3	577° 0	581° 0	572° 8	567° 4	570° 5	575° 0
32	0	597° 5	588° 0	569° 8	577° 0	578° 2	581° 4	572° 2	567° 2	570° 6	571° 0
37	0	598° 5	586° 0	570° 4	577° 2	578° 4	584° 2	572° 8	563° 4	568° 4	573° 4
42	0	596° 5	583° 0	571° 0	577° 4	578° 0	584° 0	571° 2	567° 2	567° 5	573° 4
47	0	599° 0	582° 0	571° 8	578° 0	577° 2	582° 0	566° 8	568° 8	568° 0	572° 0
52	0	598° 0	580° 0	573° 0	578° 2	577° 0	581° 5	565° 4	570° 0	569° 0	572° 0
57	0	591° 0	576° 5	576° 2	578° 4	577° 4	581° 0	564° 2	570° 4	570° 0	571° 8
Thermometer		73° 2	73° 5	72° 1	72° 0	71° 4	71° 4	71° 0	70° 8	70° 6	70° 4
M.		One Scale Division = 0° 00066 parts of the V. F.						VERTICAL FORCE.			
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
3	0	179° 1	181° 4	182° 5	182° 7	182° 9	179° 9	174° 3	177° 1	174° 4	170° 2
8	0	179° 1	183° 0	183° 0	182° 7	182° 4	179° 9	174° 3	176° 7	174° 7	175° 7
13	0	179° 1	183° 4	182° 5	182° 7	182° 2	179° 9	174° 1	174° 6	175° 4	178° 6
18	0	181° 4	183° 1	182° 5	182° 8	181° 8	179° 9	173° 0	174° 6	175° 4	177° 8
23	0	181° 8	183° 1	182° 5	182° 8	180° 6	179° 9	171° 3	174° 3	174° 7	177° 8
28	0	181° 8	183° 1	182° 5	182° 9	180° 4	179° 9	171° 3	172° 9	175° 0	179° 4
33	0	182° 7	183° 1	182° 5	182° 9	180° 4	179° 6	171° 5	172° 9	175° 0	179° 4
38	0	182° 7	183° 1	182° 5	182° 9	179° 9	179° 5	171° 5	172° 4	173° 4	179° 4
43	0	182° 7	183° 1	182° 5	182° 6	179° 9	175° 5	172° 0	174° 4	173° 4	179° 9
48	0	182° 8	183° 1	182° 5	182° 6	179° 9	175° 5	174° 2	174° 4	173° 4	181° 4
53	0	182° 8	183° 1	182° 5	182° 6	179° 9	175° 5	174° 6	174° 4	175° 0	181° 4
58	0	181° 8	183° 1	182° 5	182° 6	179° 9	175° 0	177° 1	174° 4	177° 1	182° 1
Thermometer		71° 9	71° 5	71° 3	70° 8	70° 5	70° 9	72° 3	72° 3	72° 3	72° 3
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
			Dry.	Wet.	Dry.	Wet.	Direction.	Force.			
D.	H.	M.	In.	°	°	°					
29	10	0	29° 275	69° 2	63° 1		E. by S.	Very light.	Cloudy; cir.-cum. and cum. strat.		
	11	0	29° 263	64° 8	60° 2		E. by S.	Very light.	Cloudy; cir.-cum. and cum.-strat.		
	12	0	29° 255	65° 0	60° 2		—	Calm.	Cloudy; cir.-cum. and cum.-strat.		
	13	0	29° 262	64° 0	60° 0		—	Calm.	Cloudy; cir.-cum., cum.-strat. and haze.		
	14	0	29° 252	61° 7	58° 2		E. by N.	Very light.	Cloudy; cir.-cum., cum.-strat. and haze.		
	15	0	29° 258	61° 7	57° 3		—	Calm.	Cloudy; cir.-cum., cum.-strat. and haze.		
	16	0	29° 240	61° 7	57° 4		—	Calm.	Overcast; rain, lightning, and thunder.		
	17	0	29° 247	62° 1	57° 5		—	Calm.	Overcast; rain, lightning, and thunder.		
	18	0	29° 227	62° 6	58° 2		—	Calm.	Overcast; rain, lightning, and thunder.		
	19	0	29° 241	61° 8	59° 2		E. by N.	Very light.	Overcast; lightning and thunder; occasional rain.		
	20	0	29° 203	59° 9	58° 0		N.N.E.	Very light.	Overcast; lightning, thunder, and occasional rain.		
	21	0	29° 199	60° 5	58° 8		N.N.E.	Very light.	Overcast; rain, with lightning and thunder.		

* At 304 10° Thermometer of H. F., 73° 5; of V. F., 72° 0.

MAGNETICAL OBSERVATIONS.

M = 29th and 30th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
110° 2	109° 2	115° 9	125° 0	130° 0	126° 0	120° 2	117° 0	108° 2	106° 2	97° 6	100° 6	104° 2
109° 6	109° 1	117° 0	124° 8	131° 0	126° 0	119° 0	117° 0	108° 2	105° 8	98° 7	101° 0	104° 1
108° 8	110° 2	118° 5	126° 0	130° 0	126° 0	118° 2	116° 2	108° 2	105° 8	99° 8	101° 8	104° 3
107° 8	111° 7	120° 0	126° 8	127° 5	127° 0	117° 6	116° 1	109° 0	105° 0	100° 2	103° 3	104° 7
107° 5	112° 6	120° 9	127° 0	127° 0	127° 4	118° 0	111° 2	111° 2	104° 6	100° 3	103° 4	105° 0
106° 8	113° 8	121° 2	127° 0	127° 8	128° 8	117° 4	114° 8	111° 4	102° 8	100° 8	104° 0	105° 3
106° 0	115° 0	121° 9	126° 2	128° 0	129° 4	117° 0	114° 8	111° 2	98° 6	100° 8	103° 9	105° 4
107° 2	114° 7	122° 6	126° 0	128° 0	129° 0	117° 2	115° 0	110° 8	98° 7	100° 2	103° 9	105° 8
106° 2	114° 8	121° 7	126° 8	128° 0	129° 4	117° 4	117° 2	109° 4	97° 7	100° 0	104° 0	105° 8
106° 5	115° 9	122° 0	127° 8	127° 0	125° 7	116° 6	113° 6	107° 0	97° 4	100° 8	104° 4	105° 0
107° 0	117° 0	123° 0	128° 7	127° 0	123° 0	117° 0	112° 0	105° 4	96° 5	100° 6	104° 0	106° 2
108° 3	116° 9	124° 0	129° 7	126° 0	121° 3	117° 4	109° 6	106° 0	96° 8	100° 3	103° 4	106° 4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of temperature, 1° 63.

572° 6	567° 0	573° 0	578° 0	567° 2	566° 0	554° 2	560° 2	555° 2	551° 2	551° 2	562° 2	575° 0
573° 7	566° 0	573° 4	579° 0	567° 2	565° 0	555° 0	559° 0	546° 8	550° 6	553° 5	560° 8	577° 0
571° 6	565° 9	578° 0	576° 5	568° 0	562° 5	556° 6	558° 2	554° 6	556° 6	560° 0	564° 1	578° 0
571° 6	568° 8	578° 0	579° 4	568° 5	561° 0	556° 4	556° 0	556° 2	556° 4	567° 0	573° 0	581° 2
573° 0	572° 0	578° 0	580° 9	571° 0	562° 2	555° 8	554° 8	551° 4	557° 4	568° 4	578° 8	580° 0
567° 4	569° 0	579° 4	581° 0	572° 0	566° 0	554° 2	555° 0	550° 0	554° 8	569° 0	578° 0	579° 8
566° 2	570° 9	578° 5	580° 0	569° 0	560° 6	551° 0	556° 2	547° 6	559° 6	567° 8	580° 0	580° 0
568° 2	572° 0	578° 0	578° 0	567° 5	560° 4	553° 2	557° 0	552° 5	546° 2	565° 0	579° 6	577° 0
567° 4	571° 0	578° 8	577° 0	568° 0	557° 2	557° 3	552° 2	545° 4	541° 5	564° 0	576° 6	576° 2
566° 2	571° 0	579° 0	574° 0	567° 0	557° 6	560° 0	551° 4	543° 4	543° 0	564° 0	571° 0	583° 0
565° 0	574° 8	578° 8	572° 0	567° 0	554° 0	557° 2	551° 6	551° 8	546° 8	564° 0	571° 1	584° 0
565° 2	574° 7	578° 0	569° 9	567° 0	554° 0	557° 4	554° 4	554° 6	551° 5	562° 0	571° 0	584° 0

70° 0	70° 0	69° 5	69° 0	69° 0	69° 0	68° 7	69° 4	70° 2	70° 8	71° 7	72° 4	73° 0
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of temperature, 1° 64.

180° 6	174° 3	176° 1	181° 5	183° 0	184° 5	184° 3	182° 6	179° 1	177° 2	177° 7	179° 6	183° 2
180° 0	173° 9	176° 1	181° 5	183° 3	184° 3	184° 3	181° 9	178° 6	177° 2	177° 9	179° 9	183° 7
179° 2	173° 9	176° 0	182° 1	183° 3	184° 3	183° 9	181° 9	178° 2	177° 2	178° 8	180° 4	183° 8
178° 3	174° 0	176° 1	182° 1	183° 8	183° 8	183° 9	181° 9	177° 2	178° 7	179° 1	182° 2	183° 8
177° 8	174° 0	176° 1	182° 2	183° 8	183° 8	183° 8	181° 9	177° 9	178° 4	179° 2	182° 2	184° 7
176° 1	176° 3	176° 4	183° 7	183° 1	183° 8	183° 4	181° 6	177° 9	177° 7	180° 0	182° 8	184° 7
176° 0	177° 3	176° 4	183° 7	183° 1	183° 1	183° 4	180° 9	176° 6	179° 2	179° 0	183° 0	184° 7
176° 0	177° 3	178° 6	183° 1	183° 1	183° 1	183° 4	180° 9	176° 6	177° 4	179° 0	183° 0	184° 7
175° 4	176° 8	178° 6	183° 1	183° 1	183° 1	183° 4	180° 9	176° 6	178° 2	179° 1	183° 0	184° 7
174° 7	176° 8	178° 6	182° 8	183° 1	183° 2	183° 3	179° 9	176° 6	177° 3	179° 1	183° 0	186° 0
174° 3	176° 4	180° 3	182° 8	183° 1	184° 3	182° 6	179° 9	176° 5	177° 4	179° 1	183° 0	186° 0
174° 3	176° 1	180° 3	182° 9	184° 6	184° 3	182° 6	179° 1	176° 5	177° 6	180° 3	183° 3	186° 0

7° 5	71° 5	71° 2	70° 0	69° 0	68° 5	68° 7	68° 9	69° 5	69° 9	70° 7	71° 3	71° 5
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Go-tigen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.
D.	H.	M.	In.	°	Dry.	Wet.	Dirac'on.	Force.	
29	22	0	29° 201	60° 4	59° 2	—	N.N.E.	Very light.	Cloudy; rain, lightning, and thunder.
	23	0	29° 192	60° 4	59° 3	—	—	Calm.	Cloudy; rain, lightning, and thunder.
30	0	0	29° 207	60° 2	58° 8	—	—	Calm.	Cloudy; cir-cum. and strat.
	1	0	29° 213	58° 7	57° 8	—	—	Calm.	Cloudy; cir-cum. and strat.
	2	0	29° 215	61° 5	60° 2	—	—	Calm.	Cloudy; cir-cum.
and haze.	3	0	29° 225	63° 7	62° 2	—	—	Calm.	Cloudy; cir-cum.
and haze.	4	0	29° 225	70° 3	68° 0	—	—	Calm.	Cloudy; cir-strat.
and haze.	5	0	29° 221	71° 9	69° 0	—	—	Calm.	Cloudy; cir-cum. and strat.
hunder.	6	0	29° 210	72° 5	69° 7	—	—	Calm.	Cloudy; cir-cum. and cir-strat.
hunder.	7	0	29° 207	73° 5	69° 9	—	—	Calm.	Cloudy; cir-cum. and cir-strat.
occasional rain.	8	0	29° 201	72° 1	68° 7	—	—	Calm.	Cloudy; cir-strat.
and occasional rain.	9	0	29° 195	73° 0	68° 3	—	—	Calm.	Cloudy; cir-cum. and cir-strat.

June 24th and 25th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.	
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	
0	0	110° 2	113° 2	114° 4	114° 4	112° 7	113° 1	112° 2	112° 5	111° 9	112° 6	111° 2	
5	0	110° 2	113° 6	111° 2	114° 3	113° 0	113° 4	112° 8	112° 2	112° 0	112° 1	112° 1	
10	0	110° 4	114° 7	114° 0	114° 5	113° 0	113° 2	112° 6	112° 2	112° 0	112° 0	112° 0	
15	0	111° 2	115° 0	114° 2	114° 0	114° 4	113° 9	112° 7	112° 2	111° 9	112° 1	111° 9	
20	0	111° 2	115° 2	114° 4	114° 5	114° 8	113° 8	112° 6	112° 2	112° 0	112° 1	111° 8	
25	0	111° 0	115° 4	114° 8	114° 4	114° 2	113° 8	112° 7	112° 2	112° 2	112° 1	111° 0	
30	0	111° 4	115° 4	115° 0	114° 0	113° 8	113° 8	112° 0	111° 5	112° 0	112° 0	111° 6	
35	0	112° 0	115° 0	115° 4	113° 8	113° 2	112° 8	112° 0	111° 7	112° 0	112° 0	112° 0	
40	0	112° 0	115° 2	115° 0	113° 9	113° 0	112° 2	112° 1	111° 6	111° 8	112° 3	112° 0	
45	0	112° 6	114° 8	114° 8	113° 2	113° 2	112° 2	112° 1	111° 6	111° 9	111° 9	112° 0	
50	0	112° 8	114° 8	115° 0	113° 0	113° 2	112° 0	112° 2	111° 8	111° 9	111° 9	113° 1	
55	0	113° 4	114° 6	114° 2	112° 8	113° 0	111° 7	112° 1	111° 9	112° 2	111° 7	112° 1	
		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.	
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	
2	0	587° 2	584° 6	571° 0	575° 6	575° 8	575° 2	577° 6	578° 5	577° 8	579° 0	581° 0	
7	0	585° 6	585° 4	571° 2	576° 0	575° 6	576° 8	577° 2	576° 2	577° 8	578° 0	582° 0	
12	0	584° 2	585° 0	575° 0	575° 0	576° 8	576° 7	577° 0	576° 0	578° 0	581° 2	581° 3	
17	0	583° 8	584° 6	575° 4	575° 0	577° 0	576° 0	578° 5	577° 0	578° 1	578° 8	581° 1	
22	0	582° 4	584° 8	575° 0	574° 8	577° 2	575° 2	578° 0	576° 2	578° 8	579° 0	582° 0	
27	0	580° 2	585° 0	574° 8	574° 0	575° 2	576° 0	577° 4	576° 0	579° 0	579° 5	581° 4	
32	0	579° 6	582° 2	574° 2	573° 0	576° 4	576° 6	577° 2	577° 5	577° 9	579° 5	580° 0	
37	0	578° 8	576° 0	574° 0	574° 4	575° 5	575° 8	576° 9	577° 5	577° 3	579° 1	582° 0	
42	0	577° 0	574° 8	577° 2	574° 0	575° 0	576° 0	576° 6	578° 6	578° 0	581° 0	582° 0	
47	0	580° 0	573° 6	577° 4	574° 5	575° 0	576° 0	576° 4	579° 0	578° 0	580° 0	581° 0	
52	0	582° 2	573° 8	575° 8	574° 2	574° 8	576° 8	577° 7	578° 0	578° 0	581° 0	581° 0	
57	0	582° 8	570° 5	575° 2	575° 8	575° 2	577° 6	577° 7	577° 7	578° 4	581° 0	581° 0	
Thermometer		73° 3	73° 8	73° 9	73° 8	73° 0	72° 5	72° 1	71° 9	71° 4	70° 6	70° 4	
		One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.	
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	
3	0	184° 5	182° 6	180° 6	182° 0	179° 1	176° 3	177° 0	174° 8	174° 5	176° 4	178° 7	
8	0	183° 2	181° 9	180° 6	181° 7	178° 4	176° 3	177° 0	174° 7	174° 5	176° 4	178° 7	
13	0	183° 3	182° 8	180° 6	181° 9	178° 4	175° 9	177° 0	174° 4	174° 8	176° 4	178° 7	
18	0	183° 3	182° 3	180° 8	181° 9	177° 7	175° 9	177° 0	174° 3	174° 8	177° 2	178° 7	
23	0	183° 3	182° 3	181° 8	181° 6	177° 7	176° 2	177° 1	174° 2	174° 8	178° 4	178° 7	
28	0	181° 7	182° 6	180° 9	181° 6	177° 3	176° 2	177° 1	174° 2	174° 8	178° 4	178° 7	
33	0	181° 8	182° 4	180° 9	181° 9	177° 2	176° 5	177° 1	174° 2	174° 8	178° 7	178° 7	
38	0	181° 6	181° 1	180° 9	181° 9	177° 0	176° 2	177° 6	174° 2	174° 8	178° 7	178° 7	
43	0	181° 6	181° 1	181° 2	181° 9	176° 3	176° 2	177° 6	174° 3	174° 9	178° 7	178° 7	
48	0	181° 6	181° 5	181° 1	181° 7	176° 3	176° 5	177° 6	174° 3	174° 9	178° 7	177° 4	
53	0	181° 6	181° 5	182° 2	181° 0	176° 3	177° 0	177° 1	174° 3	175° 1	178° 7	177° 4	
58	0	181° 4	180° 6	182° 0	180° 4	176° 3	177° 0	177° 1	174° 3	175° 7	178° 7	177° 4	
Thermometer		71° 3	71° 9	72° 3	72° 4	72° 7	73° 5	73° 3	72° 9	73° 0	72° 5	71° 5	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.		Barometer at 32°.	Thermometers.		Wind.		Weather.						
			Dry.	Wet.	Direction.	Force.							
D.	H.	M.	In.	°	°								
24	10	0	29° 739	80° 1	59° 4	N.W. by N.	Light.	Clear and fine.					
	11	0	29° 719	79° 5	61° 9	N.N.W.	Moderate.	Clear and fine.					
	12	0	29° 713	77° 8	62° 1	N.N.W.	Moderate.	Clear and fine.					
	13	0	29° 721	74° 0	63° 5	N.N.W.	Moderate.	Clear and cloudless.					
	14	0	29° 719	68° 7	58° 4	N.N.W.	Light.	Clear and cloudless.					
	15	0	29° 735	67° 3	56° 2	—	Calm.	Clear; fine.					
	16	0	29° 731	65° 3	55° 7	—	Calm.	Clear; very fine.					
	17	0	29° 722	66° 2	55° 3	—	Calm.	Clear; very fine.					
	18	0	29° 726	65° 5	54° 5	—	Calm.	Clear; very fine.					
	19	0	29° 720	65° 3	54° 6	—	Calm.	Clear.					
	20	0	29° 703	64° 4	53° 6	—	Calm.	Clear; fine.					
	21	0	29° 704	64° 4	53° 4	N.W. by N.	Very Light.	Clear; fine.					

* At 25° 10', Thermometer of H. F., 76° 5'; of V. F., 74° 7'.

MAGNETICAL OBSERVATIONS.

June 24th and 25th.

[illegible]

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

579°0	584°0	585°6	578°6	576°0	566°6	569°0	575°0	569°8	578°0	583°2	580°2	579°2
579°0	586°0	584°7	579°0	577°2	565°8	570°0	574°8	572°0	578°0	579°5	581°0	576°8
578°5	589°2	584°0	579°4	576°2	568°2	567°4	573°4	572°5	577°0	575°4	583°2	576°2
579°0	589°4	582°6	582°0	573°6	567°0	567°2	572°8	573°0	579°0	575°0	588°2	574°0
578°5	587°0	580°5	582°2	571°8	567°0	568°8	574°0	571°5	577°5	577°0	589°0	574°2
577°0	586°2	580°3	581°6	571°0	566°8	571°0	572°0	573°1	577°0	577°1	597°2	573°0
577°0	585°0	580°2	582°0	568°4	567°0	572°8	571°0	573°4	575°2	574°0	577°8	572°2
577°0	582°2	580°3	579°2	567°8	568°8	572°2	571°5	574°0	576°5	580°0	595°4	574°6
577°5	581°6	580°3	579°5	567°8	566°6	572°0	572°5	576°0	578°0	578°6	594°2	577°4
578°8	580°4	580°8	578°3	566°8	566°5	574°2	574°3	576°0	579°0	576°6	590°8	578°2
583°5	585°0	581°0	577°2	567°2	567°2	573°4	572°5	577°2	582°0	579°2	588°8	577°4
583°3	585°3	582°8	576°3	567°2	568°2	573°0	571°5	578°0	581°5	578°0	588°3	577°2
69°6	69°3	68°7	68°7	69°0	69°8	70°8	71°7	73°2	73°8	75°0	75°7	76°4

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

176°6	172°8	175°3	179°8	182°5	181°8	178°3	179°4	175°7	175°2	176°5	174°8	173°5
176°6	172°0	175°5	180°2	182°6	181°8	180°0	179°6	175°3	175°2	175°7	175°2	175°5
176°6	170°9	175°3	181°5	182°6	181°8	178°8	179°2	175°3	175°5	174°8	175°0	176°5
176°7	170°8	175°7	181°9	183°1	181°2	181°2	178°9	175°9	175°5	174°8	175°6	174°0
175°5	170°7	175°7	181°9	182°8	180°7	179°1	178°9	175°7	176°5	175°3	176°1	174°0
176°2	170°0	175°2	181°9	181°4	178°7	179°1	178°5	174°3	176°6	175°3	176°9	174°0
176°3	171°2	175°4	182°3	181°2	180°6	181°7	175°7	175°2	176°5	175°3	176°3	174°3
176°8	171°3	175°9	181°9	181°1	181°5	179°3	175°7	175°2	176°5	175°3	175°6	174°2
176°9	171°8	178°0	182°2	181°1	180°6	179°2	178°0	174°6	176°5	175°0	176°1	174°7
176°9	173°5	175°7	182°2	181°1	179°8	179°2	177°6	174°6	176°5	175°8	176°1	174°8
175°2	174°2	178°7	182°0	182°2	181°0	179°9	176°9	175°2	176°8	174°2	175°4	174°8
173°8	175°4	179°7	182°3	182°6	178°3	179°7	176°3	175°2	176°5	174°4	175°0	174°8
71°1	70°7	69°9	69°6	69°2	69°5	70°3	70°9	71°5	72°3	73°3	73°9	74°7

METEOROLOGICAL OBSERVATIONS

Mean Gottingen Time.			Barometer at 32°.	Thermometers.		Wind.		*.	Weather.
						Dry.	Wet.	Direction.	Force.
D.	H.	M.	In.	°	°				
24	22	0	29'499	63'9	52'9	N.W. by N.	Very light.		Clear and fine.
	23	0	29'725	64'4	53'4	N.W. by N.	Very light.		Clear and fine.
25	0	0	29'723	66'7	55'7	—	Calm.		Fine; cir.-cum.
	1	0	29'730	69'0	56'9	—	Calm.		Fine; cir.-cum.
	2	0	29'722	72'5	60'5	N.N.W.	Very light.		Fine; cir.-cum.
	3	0	29'710	76'4	63'0	N.N.W.	Moderate.		Fine; cir.
	4	0	29'704	79'3	62'4	N.N.W.	Moderate.		Fine; cir.
	5	0	29'693	81'7	64'1	N.N.W.	Moderate.		Fine; cir. and cir.-cum.
	6	0	29'674	82'7	64'3	N.N.W.	Moderate.		Fine; cir. and cir.-cum.
	7	0	29'658	84'1	66'1	N.W.	Moderate.		Fine; cir.-cum.
	8	0	29'647	82'0	69'7	S. by W.	Very light.		Fine; cir.-cum.
	9	0	29'643	80'7	68'7	S. by W.	Very light.		Fine; clear.

July 22nd and 23rd.												
MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.				
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	108° 2	109° 2	110° 2	110° 4	111° 4	111° 7	112° 4	112° 0	113° 2	116° 0	118° 0
5	0	107° 8	109° 0	109° 4	111° 0	112° 0	111° 6	112° 8	112° 2	113° 8	116° 2	117° 3
10	0	107° 8	109° 0	109° 0	110° 8	111° 8	111° 6	113° 2	112° 6	114° 0	117° 0	116° 0
15	0	107° 8	109° 2	110° 2	111° 2	112° 0	111° 5	113° 0	112° 8	114° 1	116° 3	115° 8
20	0	107° 8	109° 4	110° 0	111° 0	112° 4	111° 4	112° 5	112° 8	115° 2	114° 9	115° 8
25	0	108° 0	109° 7	109° 6	110° 8	112° 6	111° 8	112° 8	112° 8	116° 0	114° 0	115° 7
30	0	108° 2	109° 2	110° 2	110° 8	111° 4	112° 0	112° 4	112° 4	117° 2	113° 8	116° 0
35	0	108° 6	109° 2	109° 2	111° 2	111° 8	113° 2	112° 2	112° 4	118° 2	114° 0	115° 3
40	0	108° 8	109° 3	109° 6	111° 0	111° 6	113° 6	113° 0	113° 7	117° 0	114° 3	115° 0
45	0	109° 0	109° 2	109° 2	111° 0	111° 0	113° 2	112° 9	113° 2	116° 3	116° 0	115° 0
50	0	109° 2	109° 4	110° 2	111° 2	110° 8	112° 8	112° 4	113° 0	116° 0	117° 0	114° 1
55	0	109° 0	110° 0	110° 0	111° 4	111° 4	112° 4	112° 0	113° 2	116° 4	118° 0	114° 0
One Scale Division = '000087 parts of the H. F.												
M.	S.	HORIZONTAL FORCE.										
2	0	584° 8	581° 2	579° 8	577° 8	579° 6	578° 8	581° 8	580° 9	582° 0	581° 0	582° 0
7	0	582° 0	581° 4	577° 7	578° 4	579° 8	578° 2	581° 4	581° 0	582° 0	579° 2	579° 8
12	0	578° 8	581° 2	578° 3	579° 2	580° 8	578° 4	581° 6	581° 0	582° 2	580° 7	579° 8
17	0	579° 2	581° 0	578° 0	579° 4	581° 4	578° 6	581° 8	581° 4	582° 0	580° 0	579° 4
22	0	578° 6	580° 6	577° 4	578° 8	579° 8	576° 8	579° 8	581° 6	583° 9	578° 6	579° 9
27	0	579° 3	583° 2	577° 0	577° 2	578° 8	579° 2	580° 0	581° 6	584° 1	582° 0	578° 6
32	0	580° 6	582° 6	577° 4	577° 2	578° 0	579° 2	580° 0	581° 6	584° 0	586° 0	578° 0
37	0	581° 2	582° 7	578° 0	578° 8	580° 2	579° 8	580° 4	581° 6	584° 0	588° 7	577° 8
42	0	581° 4	582° 2	578° 2	580° 0	578° 5	580° 4	581° 0	582° 0	582° 0	587° 0	577° 8
47	0	581° 6	580° 8	578° 4	579° 8	576° 6	580° 6	581° 2	583° 2	581° 4	585° 0	577° 1
52	0	581° 0	580° 6	579° 2	580° 0	577° 5	580° 4	580° 4	583° 6	581° 0	582° 8	577° 5
57	0	581° 0	580° 6	579° 4	581° 4	578° 8	580° 2	580° 2	582° 0	581° 0	581° 5	577° 5
Thermometer		73° 5	73° 6	73° 5	73° 2	74° 8	74° 5	73° 6	73° 0	73° 0	73° 0	72° 5
One Scale Division = '000063 parts of the V. F.												
M.	S.	VERTICAL FORCE.										
3	0	168° 3	172° 7	172° 7	172° 8	172° 2	170° 4	173° 5	175° 1	175° 4	173° 0	168° 5
8	0	167° 9	172° 7	172° 9	172° 8	172° 0	170° 4	174° 5	175° 1	175° 4	173° 1	168° 5
13	0	168° 8	172° 8	173° 0	172° 9	172° 0	170° 4	173° 4	175° 6	175° 4	172° 7	169° 1
18	0	170° 0	173° 2	173° 0	172° 9	171° 3	170° 4	174° 1	175° 6	175° 4	172° 7	169° 1
23	0	172° 4	173° 2	173° 1	172° 7	171° 3	170° 1	174° 1	175° 6	175° 1	172° 7	169° 1
28	0	173° 2	173° 2	173° 1	172° 7	171° 0	170° 5	174° 1	175° 6	175° 1	171° 8	169° 1
33	0	173° 2	173° 3	173° 0	172° 7	170° 6	170° 5	173° 9	175° 6	173° 2	171° 8	169° 4
38	0	173° 5	173° 3	172° 7	173° 1	170° 7	170° 3	173° 9	175° 6	173° 0	170° 2	169° 4
43	0	173° 4	173° 1	172° 7	173° 3	170° 7	170° 3	173° 9	175° 6	173° 2	169° 5	170° 1
48	0	173° 3	173° 2	172° 6	173° 3	170° 7	170° 1	173° 9	175° 4	173° 2	168° 0	170° 5
53	0	173° 3	173° 3	172° 7	173° 3	170° 7	170° 2	173° 9	175° 4	173° 2	168° 0	170° 6
58	0	172° 8	173° 3	172° 8	173° 5	170° 4	170° 3	173° 9	175° 4	173° 2	168° 0	170° 6
Thermometer		74° 5	74° 7	74° 7	74° 5	74° 7	74° 1	73° 7	73° 0	72° 9	73° 0	73° 1
Increasing Numbers denote decreasing Westerly Declination.												
METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.			
			In.	°	°	Dry.	Wet.	Direction.	Force.			
D.	H.	M.	In.	°	°							
22	10	0	29° 534	74° 1	67° 4	—	—	—	Calm.	Cloudy; cir.-strat. and cir.-cum.		
	11	0	29° 533	73° 1	67° 3	—	—	—	Calm.	Cloudy; cum.-strat. and cir.-cum.		
	12	0	29° 505	73° 1	66° 9	—	—	—	Calm.	Cloudy; cum.-strat.		
	13	0	29° 506	69° 1	64° 7	—	—	—	Calm.	Cloudy; cum.-strat.		
	14	0	29° 515	63° 3	60° 7	—	—	—	Calm.	Cloudy; cir.-strat. and cir.-cum.		
	15	0	29° 508	61° 9	60° 1	—	—	—	Calm.	Cloudy; cir.-strat. and cir.-cum.		
	16	0	29° 518	59° 9	58° 6	—	—	—	Calm.	Cloudy; cir.-strat. and cir.-cum.		
	17	0	29° 511	59° 5	57° 1	—	—	—	Calm.	Cloudy; cum.-strat.		
	18	0	29° 509	59° 1	57° 1	—	—	—	Calm.	Cloudy; cum.-strat.		
	19	0	29° 486	58° 5	57° 1	—	—	—	Calm.	Cloudy; cir.-cum. and cir.-strat.		
	20	0	29° 467	56° 9	55° 5	—	—	—	Calm.	Cloudy; cir.-cum. and cir.-strat.		
	21	0	29° 465	55° 8	54° 4	E.N.E.	Very light.			Cloudy; cir.-strat.		

* At 29° 10'; Thermometer of H. F., 77° 3'; of V. F., 76° 1'.

19°.	20°.
Sc. Div.	Sc. Div.
116°0	118°0
116°2	117°3
117°0	116°0
116°3	115°8
114°9	115°8
114°0	115°7
113°8	116°0
114°0	115°3
114°3	115°0
116°0	115°0
117°0	114°1
118°0	114°0

L. FORCE.

581°0	582°0
579°2	579°8
580°7	579°8
580°0	579°4
578°6	579°9
582°0	578°6
586°0	578°0
588°7	577°8
587°0	577°8
585°0	577°1
582°8	577°5
581°5	577°5

73°0	72°5
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FORCE.

173°0	168°5
173°1	168°5
172°7	169°1
172°7	169°1
172°7	169°1
171°8	169°1
171°8	169°4
170°2	169°4
169°5	170°1
168°0	170°5
168°0	170°6
168°0	170°6

73°0	73°1
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g Westerly Declination.

MAGNETICAL OBSERVATIONS.

July 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0°721.

21 ^h	22 ^h	23 ^h	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
115°0	107°6	115°4	120°2	124°4	123°5	116°4	114°1	106°9	107°0	105°2	104°0	105°5
115°0	104°8	115°0	119°8	124°2	124°0	114°6	112°2	107°0	106°1	104°9	104°2	105°5
116°5	103°8	114°2	119°0	124°7	124°0	113°8	111°2	107°4	106°6	104°4	104°0	106°0
117°0	101°0	114°6	121°2	125°0	124°2	113°8	111°2	107°6	107°0	105°2	104°5	106°2
117°0	102°0	114°0	120°8	127°4	124°4	113°2	110°3	108°0	106°2	104°0	105°0	106°3
117°2	104°8	114°7	120°7	127°0	124°6	112°0	110°2	107°0	106°2	104°2	105°0	108°2
116°8	108°0	114°7	121°2	126°2	124°4	112°2	109°0	107°0	106°0	104°7	105°0	109°2
116°5	111°4	114°0	122°0	124°2	123°0	112°4	108°3	106°0	105°8	104°8	105°0	109°2
116°2	114°8	114°8	122°0	124°0	122°4	111°8	108°0	105°6	105°0	105°0	105°8	111°0
117°0	114°4	115°0	121°8	125°0	121°2	112°2	107°8	105°5	105°4	104°8	106°0	110°5
115°2	116°0	117°0	122°2	124°4	119°0	112°8	107°9	107°0	105°4	104°5	106°0	109°6
109°3	116°3	117°8	121°0	123°6	117°8	115°0	107°2	107°0	105°4	104°3	105°2	109°3

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

578°0	559°7	577°0	585°4	587°2	580°4	559°5	564°5	565°5	574°0	572°0	571°5	572°0
577°5	561°0	577°0	584°8	588°2	577°0	560°0	566°8	565°0	573°0	571°0	572°0	573°2
576°9	565°4	578°6	584°2	590°2	576°4	560°0	561°3	564°7	574°0	571°0	571°0	575°0
577°5	566°2	579°0	586°0	588°8	574°2	557°6	561°0	565°0	571°5	572°0	573°7	577°5
577°0	570°0	579°4	586°6	587°8	573°4	561°8	564°0	565°0	571°9	572°0	579°0	584°5
576°1	571°4	579°2	587°0	587°2	573°4	559°0	565°0	567°2	573°0	572°6	579°3	584°0
575°5	573°0	579°0	587°2	586°0	573°4	560°2	564°0	569°8	571°5	572°2	578°0	597°0
573°5	573°2	579°2	587°3	584°2	572°0	561°8	564°8	570°0	571°0	571°3	574°5	594°0
573°0	573°6	579°4	587°6	584°0	571°2	562°8	563°1	568°8	571°0	573°2	576°5	588°0
570°5	574°5	580°8	587°4	585°4	570°8	562°0	563°0	571°0	572°0	572°0	577°2	587°5
569°0	575°0	581°3	586°8	586°8	567°2	461°6	564°5	571°4	572°0	572°5	576°5	581°5
566°4	575°4	581°4	588°4	585°4	566°2	561°8	566°0	575°0	571°2	571°5	574°6	578°0
72°3	72°0	71°5	71°5	72°2	73°0	73°8	74°6	75°0	75°5	76°0	76°5	77°0*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

170°6	162°4	166°1	170°2	172°9	173°0	171°0	169°7	169°8	168°9	167°9	169°9	173°1
170°6	163°6	166°3	170°3	173°2	173°3	170°7	169°7	168°9	168°9	167°9	170°3	173°1
170°0	164°9	166°3	170°3	173°2	172°9	170°7	169°5	168°9	168°9	167°9	170°9	173°3
170°0	163°6	166°3	172°0	173°2	173°2	170°2	169°7	168°3	168°9	168°7	171°3	173°9
169°6	162°9	166°4	171°5	174°3	173°2	171°0	169°7	168°3	168°9	168°7	172°2	174°9
169°6	161°8	166°5	172°5	174°3	173°3	169°6	169°7	168°1	168°9	168°7	172°2	171°5
169°6	161°8	166°4	172°4	174°5	173°3	168°6	169°7	169°8	168°9	169°6	172°8	176°3
168°9	162°2	166°5	172°4	174°5	173°3	168°4	170°1	169°8	168°9	169°6	172°8	175°0
168°0	162°0	166°2	172°3	173°6	173°3	168°4	170°1	169°3	168°2	169°6	172°8	174°2
166°5	163°2	166°4	171°9	173°6	173°3	168°4	169°8	169°3	168°2	169°9	173°1	174°2
166°5	163°3	166°3	172°7	173°6	173°4	168°3	169°8	169°3	168°2	169°9	173°1	174°2
164°2	163°2	167°5	172°9	173°8	172°8	168°9	169°8	169°3	167°9	169°9	173°1	173°1
72°7	72°5	71°5	72°1	72°1	72°5	73°2	73°7	74°0	74°3	74°5	75°4	75°8*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean (10) Time.			Barometer at 32°.		Thermometers.		Wind.		Weather
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.	
22	22	0	29°445	56°7	55°9	—	—	Calm.	Cloudy; cir.-cum. and strat.
23	0	0	29°465	57°9	56°9	—	—	Calm.	Cloudy; cir.-cum. and strat.
23	0	0	29°492	61°5	59°7	—	—	Calm.	Cloudy; fine.
1	0	0	29°501	66°7	63°7	—	—	Calm.	Cloudy; fine.
2	0	0	29°492	70°8	64°5	—	—	Calm.	Cloudy; fine.
3	0	0	29°471	74°6	65°2	—	—	Calm.	Fine; cir.-cum. and strat.
4	0	0	29°460	79°1	69°3	—	—	Calm.	Fine; cir.-cum. and strat.
5	0	0	29°456	76°7	69°4	—	—	Calm.	Fine; cir.-cum. and cir.-strat.
6	0	0	29°438	78°8	70°4	—	—	Calm.	Cloudy; fine, with cir.-cum.
7	0	0	29°431	79°9	70°7	—	—	Calm.	Cloudy; fine.
8	0	0	29°425	80°9	68°5	—	—	Calm.	Cloudy; cir.-cum. and strat.
9	0	0	29°406	79°5	67°8	—	—	Calm.	Cloudy; cir.-cum. and cir.-strat.

August 28th and 29th.		MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of one Scale Division = 0°.721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	119°0	118°3	105°2	107°0	109°9	120°0	135°4	112°2	111°0	108°9	106°6	106°6
5	0	119°6	119°1	106°0	107°5	111°0	124°5	128°0	111°0	110°3	108°0	107°0	107°0
10	0	128°2	114°0	106°7	107°4	113°2	126°7	120°9	113°3	109°5	108°7	106°2	106°2
15	0	132°8	110°2	106°9	107°0	114°2	133°8	119°0	114°0	109°7	109°0	107°0	107°0
20	0	128°1	113°5	107°0	107°2	123°8	138°0	119°7	115°2	108°2	109°0	106°4	106°4
25	0	127°2	108°0	107°3	106°7	129°0	142°0	115°3	115°0	108°3	109°6	108°2	108°2
30	0	123°0	106°2	107°2	107°8	131°5	148°4	116°0	115°0	109°3	111°2	108°0	108°0
35	0	119°0	104°8	106°0	107°3	144°0	147°9	119°6	113°7	107°0	109°2	106°2	106°2
40	0	119°9	104°2	106°0	107°0	137°8	139°7	120°3	112°0	104°6	114°0	108°2	108°2
45	0	117°2	103°0	106°2	107°2	131°0	142°8	116°0	111°2	104°1	113°8	108°2	108°2
50	0	113°1	103°6	106°5	106°5	126°8	117°0	113°3	111°0	105°0	113°2	108°7	108°7
55	0	116°6	101°2	107°0	108°5	125°4	141°8	112°3	111°4	107°5	112°6	108°3	108°3

M. S.		One Scale Division = '000087.						HORIZONTAL FORCE.					
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	611°8	577°8	560°4	574°0	578°0	587°5	561°0	564°0	571°0	575°0	567°4	567°4
5	0	612°2	575°3	571°0	574°0	578°0	580°5	547°0	564°0	574°0	572°2	567°2	567°2
10	0	621°4	572°0	561°0	574°0	570°0	580°9	540°0	566°5	576°7	564°0	566°8	566°8
15	0	621°2	570°6	561°1	575°9	568°0	586°6	538°5	568°0	577°5	562°2	572°2	572°2
20	0	614°2	566°2	560°2	576°0	570°8	596°5	547°0	567°5	573°5	561°4	575°0	575°0
25	0	603°8	571°0	576°7	575°8	578°0	589°0	541°0	564°6	572°5	561°2	575°4	575°4
30	0	598°2	562°2	575°0	574°5	586°5	586°5	543°5	565°5	576°5	566°6	576°2	576°2
35	0	595°2	566°0	569°5	571°0	588°4	585°8	552°5	569°0	576°5	567°0	574°4	574°4
40	0	593°8	561°4	570°0	571°5	591°6	577°0	559°0	565°5	571°0	567°1	575°0	575°0
45	0	591°0	563°4	569°0	571°0	589°9	569°1	564°0	567°0	571°5	567°2	573°6	573°6
50	0	582°3	561°0	566°0	572°0	590°0	569°0	564°0	569°0	571°5	567°6	577°0	577°0
55	0	582°4	561°5	570°0	577°5	594°5	573°0	564°0	569°0	573°5	568°4	576°2	576°2

Thermometer	76°0	75°8	75°8	75°6	75°6	75°4	75°0	74°5	74°1	74°0	73°7
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M. S.		One Scale Division = '000063.						VERTICAL FORCE.					
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	189°3	188°8	176°2	171°1	170°0	155°7	155°6	167°9	169°7	162°5	162°9	162°9
5	0	188°6	187°0	174°5	171°1	170°0	155°7	153°3	167°9	168°4	158°2	162°0	162°0
10	0	189°0	185°7	174°1	171°1	169°6	155°6	153°3	168°4	167°2	160°2	162°2	162°2
15	0	184°6	185°3	171°3	171°6	169°6	149°5	156°4	168°7	165°3	158°1	164°2	164°2
20	0	182°9	183°1	175°4	171°6	161°8	147°6	158°0	168°7	164°0	157°9	161°7	161°7
25	0	182°9	182°5	175°1	171°6	160°2	147°2	158°0	167°3	164°4	158°6	163°4	163°4
30	0	181°0	179°5	175°8	171°5	162°2	148°7	162°2	167°3	165°1	157°0	165°1	165°1
35	0	181°7	179°3	175°4	171°5	159°1	148°7	165°8	168°7	164°1	158°1	166°7	166°7
40	0	183°4	178°4	172°9	171°5	153°1	148°0	165°8	165°5	163°3	157°8	166°6	166°6
45	0	186°9	177°8	171°9	171°5	151°4	148°0	166°5	168°9	162°2	159°5	166°2	166°2
50	0	187°7	178°0	171°0	171°5	151°4	149°3	166°5	170°8	162°2	159°7	166°7	166°7
55	0	189°1	176°9	171°1	171°5	154°6	149°7	166°5	170°5	162°2	162°2	167°9	167°9

Thermometer	74°5	74°5	74°7	74°8	76°1	76°0	75°5	75°2	75°0	74°9	74°7
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Increasing Numbers denote decreasing westerly Declination.

METEOROLOGICAL OBSERVATIONS.													
Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.				
					Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°.									
28	10	0	29°709	74°6	70°1	—	E.S.E.	Very light.	Cloudy; cum.-strat. and cir.-cum.				
28	11	0	29°705	72°1	69°7	—	N.N.E.	Very light.	Cloudy; cum.-strat. and cir.-cum.				
28	12	0	29°713	71°7	68°3	—	—	Calm.	Cloudy; cum.-strat. and cir.-cum.				
28	13	0	29°709	69°3	67°3	—	—	Calm.	Clear, with strat. and cir.-cum.				
28	14	0	29°703	67°9	66°3	—	—	Calm.	Clear; cir.-cum.				
28	15	0	29°703	65°9	64°7	—	—	Calm.	Clear; cir.-cum.				
28	16	0	29°697	65°6	64°1	—	—	Calm.	Clear; cir.-cum. and cir.-strat.; aurora visible.				
28	17	0	29°694	65°5	64°2	—	—	Calm.	Cloudy; sheet lightning in S.E.				
28	18	0	29°686	63°9	62°9	—	—	Calm.	Cloudy; fine.				
28	19	0	29°694	62°9	62°0	—	—	Calm.	Cloudy; fine; cir.-cum.				
28	20	0	29°702	61°7	60°9	—	—	Calm.	Clear; cir. and cir.-cum.				
28	21	0	29°689	60°9	60°1	—	—	Calm.	Clear; cir. and cir.-strat.				

* At 29° 10', Thermometer of H. F., 76° + 3; of V. F., 74° + 4.

19°.	20°.
Sc. Div.	Sc. Div.
108°9	106°6
108°0	107°0
108°7	106°2
109°0	107°0
109°0	106°4
109°6	108°2
111°2	108°0
109°2	106°2
114°0	108°2
113°8	108°2
113°2	108°7
112°6	108°3

H. FORCE.

575°0	567°4
572°2	567°2
564°0	566°8
562°2	572°2
561°4	575°0
561°2	575°4
566°6	576°2
567°0	574°4
567°4	575°0
567°2	573°6
567°6	577°0
568°4	576°2

V. FORCE.

162°5	162°9
158°2	162°0
160°2	162°2
158°1	164°2
157°9	161°7
158°6	163°4
157°0	165°1
158°1	166°7
157°8	166°6
159°5	166°2
1 9°7	166°7
162°2	167°9

g westerly Declination.

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t; aurora visible.
E.

MAGNETICAL OBSERVATIONS.													August 28th and 29th.		
DECLINATION.						Angular Value of one Scale Division = 0°721.									
21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.			
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
110°2	104°2	110°0	117°2	124°2	121°4	116°0	116°0	113°5	113°3	107°0	102°8	104°0	101°0		
110°2	103°0	111°2	118°8	124°3	121°8	116°4	115°5	113°0	113°0	107°2	103°2	103°5	103°5		
111°2	101°2	112°0	120°0	123°2	121°0	112°0	116°0	111°8	112°3	106°6	102°8	104°2	104°2		
110°0	101°2	113°0	120°6	124°8	118°4	113°0	114°5	111°5	110°0	105°2	103°0	103°4	103°4		
1 8°8	101°4	114°4	121°0	122°0	117°0	113°2	114°5	111°8	107°5	104°2	102°6	104°5	104°5		
109°2	102°8	113°2	122°0	122°0	117°8	112°0	115°5	111°8	108°6	101°0	101°8	105°2	105°2		
109°4	103°2	114°4	122°0	120°2	118°0	113°1	115°1	112°0	106°2	103°2	102°8	105°8	105°8		
108°0	104°0	115°4	122°6	122°4	118°7	113°8	114°0	111°0	107°8	103°0	103°0	106°6	106°6		
106°2	105°0	115°4	121°5	122°0	119°0	115°2	116°5	112°5	109°2	103°2	103°8	106°6	106°6		
103°8	107°8	115°5	122°8	122°0	118°8	115°8	115°3	110°0	108°6	102°4	103°8	106°5	106°5		
103°0	108°3	113°4	124°0	122°6	117°7	114°8	116°0	110°0	108°8	103°0	103°5	106°8	106°8		
103°2	108°0	114°0	123°2	121°9	116°1	114°0	114°6	110°9	108°4	102°2	104°0	106°8	106°8		
HORIZONTAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.		
579°6	567°4	567°8	576°2	573°2	561°0	574°5	568°5	574°0	570°0	568°2	578°1	589°6	589°6		
578°0	566°7	568°2	577°4	572°3	561°6	566°5	568°2	575°0	568°0	568°6	573°4	590°2	590°2		
579°2	563°6	568°4	579°2	571°4	566°1	560°0	568°2	573°8	566°5	568°4	571°2	590°0	590°0		
577°0	564°2	571°2	579°2	575°6	567°8	562°2	571°0	571°6	567°5	566°0	569°0	591°2	591°2		
574°8	565°4	572°8	581°4	578°6	566°2	564°8	571°1	570°0	568°0	560°2	570°5	589°2	589°2		
575°2	568°0	571°6	581°4	576°6	565°0	563°5	572°4	574°0	566°4	554°4	568°6	590°5	590°5		
576°0	571°2	570°4	581°4	576°0	565°4	565°5	571°3	570°0	560°8	556°6	571°0	588°8	588°8		
570°2	569°4	570°8	580°6	575°5	565°6	566°7	573°0	568°5	563°2	562°4	572°6	581°4	581°4		
567°4	568°8	571°0	576°8	577°3	566°0	571°1	567°0	565°3	562°6	562°0	571°4	581°5	581°5		
567°3	570°0	573°4	575°6	571°0	565°2	567°5	577°5	567°5	564°2	570°0	569°6	584°2	584°2		
570°2	570°8	575°0	575°2	568°2	568°0	565°5	572°5	565°5	563°6	566°2	571°8	581°9	581°9		
567°2	565°8	574°4	577°6	563°8	564°5	566°9	573°5	567°5	562°4	569°5	580°6	577°8	577°8		
73°2	73°0	72°6	71°9	72°0	72°5	73°2	74°0	75°0	76°2	76°2	75°7	75°8	75°8		
VERTICAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°61.		
168°6	167°7	166°8	175°0	171°7	170°5	169°2	169°0	167°0	168°6	170°9	170°6	172°2	172°2		
168°8	166°3	166°7	175°0	172°0	170°4	169°7	169°0	167°0	168°6	170°9	170°2	172°2	172°2		
168°6	165°3	168°3	175°4	173°0	171°3	169°7	167°0	167°5	169°1	171°2	169°7	172°2	172°2		
169°2	165°4	168°3	175°9	173°0	171°5	170°4	167°8	166°1	168°7	171°4	169°7	172°5	172°5		
169°4	165°4	170°0	175°9	172°4	170°9	170°4	167°5	165°4	168°7	168°4	169°7	172°8	172°8		
169°3	166°1	170°0	175°9	171°5	169°5	169°7	165°5	165°4	168°3	168°5	169°6	172°9	172°9		
168°8	167°9	170°3	175°9	171°5	169°4	169°4	167°1	165°4	168°7	170°0	169°8	173°1	173°1		
167°8	167°9	170°5	175°9	170°9	169°3	169°1	166°5	167°2	168°3	167°4	168°8	173°1	173°1		
168°4	167°9	172°8	175°6	170°8	168°7	169°2	165°4	167°2	168°7	167°3	169°8	173°1	173°1		
170°1	167°8	173°9	175°6	170°4	168°7	168°4	167°2	167°1	169°3	169°1	169°8	173°5	173°5		
169°1	167°5	173°6	175°6	170°1	170°5	168°4	164°8	167°6	169°6	170°2	170°0	173°5	173°5		
168°1	166°8	173°6	173°2	170°1	170°5	168°1	164°8	167°6	170°2	169°5	170°6	173°4	173°4		
73°9	73°8	73°1	71°7	71°9	72°3	72°7	73°5	74°4	75°1	75°2	74°8	74°7	74°7		
and increasing Horizontal and Vertical Force:															
METEOROLOGICAL OBSERVATIONS.															
Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.						
					Dry.		Wet.		Direction.		Force.				
D.	H.	M.	In.		°		°								
28	22	0	29°697		60°7		59°9		—		Calm.			Clear; cir. and cir.-strat.	
	23	0	29°684		60°6		59°3		—		Calm.			Clear; cir. and cir.-cum.	
29	0	0	29°691		61°7		61°0		—		Calm.			Cloudy; cir., cir.-strat., and haze.	
	1	0	29°695		66°4		64°9		—		Calm.			Cloudy; cir., cir.-strat., and haze.	
	2	0	29°687		71°5		69°1		—		Calm.			Cloudy; fine.	
	3	0	29°687		74°1		70°9		E.		Very light.			Cloudy; cir.-strat. and haze.	
	4	0	29°668		75°8		71°0		E. by S.		Very light.			Cloudy; cir.-cum. and haze.	
	5	0	29°663		77°4		72°3		E. by S.		Very light.			Cloudy; cir.-strat.	
	6	0	29°648		77°1		72°3		E.S.E.		Very light.			Cloudy; cir.-strat. and haze.	
	7	0	29°657		73°7		71°4		S.E.		Very light.			Overcast; thunder and rain.	
	8	0	29°658		66°9		74°5		W.		Moderate.			Overcast; thunder and rain.	
	9	0	29°622		67°2		75°2		N.W.		Moderate.			Overcast; thunder and rain.	

September 23rd and 24th.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.								DECLINATION.	
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	20°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	103°5	104°6	99°3	107°0	108°5	107°8	118°8	112°7	109°0	112°0
5	0	103°0	104°0	101°0	107°0	108°6	107°7	118°3	111°0	108°2	112°2
10	0	103°8	104°0	106°8	106°6	108°2	107°2	124°0	108°8	107°7	113°3
15	0	104°0	103°0	116°0	106°4	108°4	106°8	129°8	108°8	108°5	114°1
20	0	104°2	102°0	120°0	105°7	109°0	106°2	126°2	109°0	106°4	113°3
25	0	104°8	101°6	119°2	106°0	109°2	107°2	118°6	109°2	105°3	114°0
30	0	104°8	102°0	116°0	106°2	108°0	109°2	111°6	109°2	107°0	115°0
35	0	105°0	102°0	112°1	105°8	107°0	110°0	109°4	109°3	108°2	114°8
40	0	105°0	102°0	108°2	108°0	106°2	110°0	107°5	109°8	108°8	114°2
45	0	105°0	104°0	105°0	108°2	106°3	117°0	109°8	110°4	110°0	115°0
50	0	105°0	104°1	104°8	109°0	106°2	118°8	109°8	110°2	115°3	117°8
55	0	105°0	102°8	106°8	109°2	106°5	118°2	111°9	109°8	111°8	115°4
One Scale Division = '000087 parts of the H. F.											
M. S.		HORIZONTAL FORCE.									
0	0	590°4	612°4	587°6	590°0	591°2	593°4	571°4	584°4	586°0	593°2
5	0	—	612°4	580°4	590°4	592°8	594°2	574°0	588°2	588°2	591°6
10	0	—	611°3	577°4	589°3	593°1	595°8	584°4	587°4	589°6	590°6
15	0	—	615°4	578°4	590°4	592°4	594°2	588°8	586°6	591°9	592°3
20	0	—	612°2	584°4	598°6	594°8	595°8	590°9	590°2	595°4	590°4
25	0	—	611°6	588°4	593°7	597°4	593°6	590°2	589°7	595°2	590°3
30	0	—	610°9	586°9	589°0	597°0	595°6	589°4	592°2	594°7	590°6
35	0	—	604°4	584°4	587°6	598°6	597°1	589°2	590°7	596°2	589°2
40	0	—	594°9	584°4	586°8	596°4	595°4	586°8	590°4	597°6	588°6
45	0	—	594°9	585°0	585°6	596°6	595°4	586°0	590°9	595°2	591°7
50	0	610°9	594°1	584°8	588°4	594°0	581°8	586°9	591°4	595°2	591°4
55	0	614°6	593°9	586°6	590°4	593°4	578°4	586°4	589°2	596°9	589°6
Thermometer		69°4	70°2	70°2	70°2	70°0	69°7	69°5	69°6	69°6	69°4
One Scale Division = '000063 parts of the V. F.											
M. S.		VERTICAL FORCE.									
0	0	184°4	185°0	190°2	184°2	182°1	180°8	185°7	180°6	179°1	178°8
5	0	182°6	184°9	190°3	184°2	181°4	180°8	185°3	181°0	178°4	176°0
10	0	182°6	184°9	190°5	184°5	180°5	182°5	186°3	181°0	180°7	176°0
15	0	182°6	186°3	190°0	184°6	180°3	182°4	185°8	182°2	179°3	177°3
20	0	182°6	186°0	188°8	184°8	180°8	184°4	183°7	181°4	179°1	176°5
25	0	182°6	186°7	187°4	184°6	180°7	181°3	181°8	180°3	178°4	177°0
30	0	183°1	187°6	186°6	184°8	180°7	185°8	182°4	180°3	178°4	177°5
35	0	183°1	186°8	185°4	184°8	180°6	188°2	182°4	179°4	179°6	177°1
40	0	183°1	186°3	185°4	184°1	180°7	188°5	181°8	179°4	179°4	176°9
45	0	183°8	187°0	185°4	184°3	180°6	185°8	181°5	179°4	179°4	180°4
50	0	183°8	187°9	183°9	182°8	180°6	186°4	182°5	179°4	179°2	176°8
55	0	185°0	189°1	183°9	182°3	180°8	184°2	180°6	179°1	178°6	177°2
Thermometer		67°9	68°5	68°6	70°0	70°3	70°5	70°0	70°5	70°0	69°7
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
			In.	°	°	°	Direction.	Force.			
D.	H.	M.	In.	°	°	°	—	—	Generally clear.		
23	10	0	29°543	72°2	66°8	—	—	Calm.			
	11	0	29°528	69°9	65°8	—	—	Calm.	Generally clear.		
	12	0	29°527	67°3	64°2	—	—	Calm.			
	13	0	29°555	66°7	64°7	—	—	Calm.	Generally clear; sheet lightning nearly round the horizon.		
	14	0	29°562	65°9	64°3	—	—	Calm.			
	15	0	29°543	65°7	63°7	—	—	Calm.	Generally clear; sheet lightning nearly round the horizon.		
	16	0	29°552	64°8	63°5	—	—	Calm.			
	17	0	29°554	62°6	61°7	—	—	Calm.	Clear; sheet lightning.		
	18	0	29°562	63°1	62°3	—	—	Calm.			
	19	0	29°554	64°1	63°1	—	—	Calm.	Clear; sheet lightning.		
	20	0	29°553	63°3	62°6	—	—	Calm.			
	21	0	29°565	61°1	60°2	—	—	Calm.	Generally clear.		

* At 24° 10', Thermometer of H. F., 68° 0'; of V. F., 67° 6'.

ON.

19 ^h .	20 ^h .
Sc. Div.	Sc. Div.
112°0	117°1
112°2	116°2
113°3	115°6
114°1	116°8
113°3	116°8
114°0	115°2
115°0	118°2
114°8	118°9
114°2	118°2
115°0	118°6
115°3	117°8
115°4	117°6

AL. FORCE.

593°2	587°8
591°6	588°6
590°6	590°6
592°3	595°4
590°4	593°8
590°3	587°4
590°6	583°4
589°2	584°4
588°6	582°6
591°7	585°2
591°4	586°0
589°6	584°6

69°4

FORCE.

178°8	177°2
176°0	176°8
176°0	176°7
177°3	176°4
176°5	176°9
177°0	177°2
177°5	180°2
177°1	179°8
176°9	178°7
177°4	180°4
176°8	178°6
177°2	178°4

69°7

not Westerly Declination.

early round the horizon.
early round the horizon.
early round the horizon.

MAGNETICAL OBSERVATIONS.

September 23rd and 24th.

DECLINATION.

Angular Value of one Scale Division = 0°721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117°8	116°8	117°7	116°8	121°0	119°0	116°3	111°0	106°2	103°8	101°5	101°2	106°5
120°6	117°3	117°2	116°2	119°2	118°1	118°0	110°0	106°0	103°8	100°8	101°1	106°2
118°4	117°5	116°2	116°4	118°8	119°4	116°4	111°2	105°3	103°2	99°5	102°0	105°8
118°0	117°7	115°8	116°5	120°2	117°8	117°0	110°0	105°7	103°2	99°6	103°2	105°0
117°5	117°6	116°0	116°1	120°0	117°8	118°0	108°6	105°5	103°0	99°8	105°0	104°7
117°8	117°2	116°2	117°2	119°0	118°0	117°2	110°0	105°3	102°9	99°4	105°0	104°3
118°7	117°2	115°8	118°0	120°0	117°8	113°8	109°2	105°4	102°6	100°0	105°1	104°8
117°2	117°0	116°2	118°0	119°2	119°3	112°2	109°4	105°2	102°6	101°8	105°0	104°2
115°3	116°6	116°2	118°0	117°9	118°0	111°8	107°8	104°8	102°2	100°7	105°0	105°0
116°0	116°7	116°8	118°3	119°0	118°2	111°3	108°7	104°0	102°4	101°2	105°0	104°0
116°0	116°9	116°5	118°0	120°0	117°6	111°0	107°1	103°8	102°5	101°8	105°0	105°0
117°8	116°8	116°1	115°6	117°0	117°0	112°0	106°9	101°7	102°6	102°0	106°0	101°0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

581°4	587°4	590°4	588°9	585°8	573°9	566°2	561°4	563°8	568°5	574°4	586°4	603°4
580°8	588°6	589°4	589°4	582°9	571°4	566°7	565°2	563°6	571°4	573°6	589°4	608°2
580°0	591°4	588°4	588°9	580°9	575°9	565°0	566°4	565°2	571°6	571°6	590°8	609°4
580°8	591°5	583°6	588°9	577°9	574°4	563°4	561°2	566°1	570°1	573°6	591°1	605°6
584°6	599°4	584°8	586°9	577°4	574°9	561°8	565°1	561°3	574°2	576°4	591°8	607°4
584°4	591°4	585°4	587°4	577°9	571°4	564°4	565°9	563°6	575°2	575°4	592°4	604°8
581°8	588°6	588°0	585°4	578°4	570°9	563°8	562°2	564°7	575°0	581°2	594°6	601°2
589°2	590°2	588°4	584°9	578°4	565°4	561°8	563°9	561°0	574°2	582°6	595°4	601°0
587°4	590°2	589°4	585°1	577°9	566°4	564°0	565°6	564°9	573°8	582°8	596°2	598°4
586°7	589°8	587°1	581°4	577°9	567°4	562°1	565°1	565°6	575°2	585°6	596°2	597°2
585°0	589°2	589°5	585°4	575°4	567°9	564°6	564°1	567°5	574°4	586°8	597°2	599°8
585°0	589°4	588°9	585°4	576°9	568°2	565°6	566°4	568°8	574°6	587°4	601°4	595°4

69°0

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

180°2	175°4	175°6	175°8	178°9	177°5	177°4	177°6	180°0	178°8	182°3	183°8	183°7
181°7	175°3	175°6	175°8	178°9	177°3	177°4	176°6	177°5	178°8	181°5	184°0	183°9
181°0	175°4	175°8	175°8	178°9	178°5	176°9	177°7	177°5	178°9	181°4	184°0	183°9
179°9	175°5	175°8	175°8	177°9	177°9	176°8	177°4	177°5	181°3	181°8	184°0	184°7
179°2	175°4	175°8	176°8	178°6	177°0	176°9	177°8	179°1	181°3	181°2	184°0	185°0
177°3	175°1	175°8	176°8	178°6	177°2	177°8	177°1	179°1	181°0	181°3	184°0	185°0
177°0	175°4	175°8	176°9	178°7	177°8	177°8	177°4	179°4	181°2	182°6	183°9	184°8
177°7	175°6	175°8	177°1	178°4	177°0	177°6	178°7	179°4	181°1	183°1	183°9	184°8
177°4	175°6	175°8	177°1	178°4	177°0	177°6	178°7	178°0	180°7	183°0	183°6	184°8
174°2	175°6	175°8	178°9	178°8	177°4	177°6	178°7	177°9	181°0	183°6	183°6	184°8
174°2	175°6	175°6	178°9	178°8	177°7	177°1	178°3	179°7	181°5	184°4	183°6	184°8
174°2	175°4	175°6	178°9	178°8	177°4	177°2	178°1	179°2	181°7	183°8	183°7	181°1

70°0

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.					
23 22 0	29°557	59°9	59°3	—	Calm.	Generally clear.
23 0 0	29°577	59°8	59°0	—	Calm.	Generally clear.
24 0 0	29°599	59°9	58°8	N.W. by N.	Very light.	Cloudy.
1 0	29°641	63°9	62°4	N.W. by N.	Very light.	Cloudy; occasional rain.
2 0	29°609	61°8	62°4	N.	Very light.	Cloudy; cir-cum. and cir-strat.
3 0	29°646	61°6	61°5	W.S.W.	Very light.	Cloudy; cir-cum. and cir-strat.
4 0	29°648	61°8	63°9	W. by S.	Very light.	Cloudy; occasional rain.
5 0	29°611	61°8	64°0	W. by S.	Very light.	Cloudy; occasional rain.
6 0	29°619	66°1	65°1	—	Calm.	Cloudy and rainy.
7 0	29°627	65°6	64°5	N. by W.	Light.	Cloudy with rain.
8 0	29°629	61°7	59°9	N. by W.	Moderate.	Cloudy; cir-cum. and cir-strat.
9 0	29°629	62°1	59°4	N.E. by N.	Very light.	Cloudy; occasional rain.

October 21st and 22nd.		MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of One Scale Division = 0° 721.										DECLINATION.	
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	108° 9'	114° 0'	113° 9'	112° 0'	113° 9'	113° 3'	133° 6'	124° 2'	111° 0'	111° 2'	113° 2'	
5	0	108° 0'	113° 1'	114° 0'	112° 0'	113° 2'	115° 0'	131° 0'	123° 0'	112° 7'	111° 3'	111° 2'	
10	0	109° 2'	112° 0'	114° 2'	112° 3'	113° 1'	115° 0'	128° 0'	120° 2'	113° 0'	111° 2'	111° 2'	
15	0	109° 8'	111° 0'	113° 1'	112° 0'	113° 5'	116° 3'	124° 1'	119° 2'	113° 4'	111° 8'	111° 0'	
20	0	109° 8'	110° 3'	111° 0'	112° 2'	113° 9'	117° 2'	122° 0'	117° 4'	112° 8'	112° 0'	111° 4'	
25	0	110° 5'	109° 9'	110° 2'	112° 7'	114° 0'	117° 1'	121° 4'	115° 6'	112° 2'	112° 8'	111° 8'	
30	0	111° 0'	112° 0'	111° 0'	113° 1'	113° 1'	119° 0'	121° 0'	115° 8'	112° 7'	113° 2'	113° 0'	
35	0	111° 0'	106° 0'	111° 2'	113° 2'	112° 2'	119° 7'	120° 0'	116° 2'	113° 0'	113° 2'	113° 4'	
40	0	111° 0'	103° 8'	111° 2'	113° 6'	111° 7'	123° 8'	123° 2'	117° 0'	113° 2'	113° 2'	114° 2'	
45	0	111° 7'	104° 2'	111° 3'	113° 6'	111° 0'	124° 8'	124° 6'	116° 0'	112° 7'	113° 4'	114° 5'	
50	0	112° 8'	109° 8'	111° 1'	113° 0'	110° 9'	128° 0'	125° 0'	113° 3'	112° 4'	113° 4'	113° 8'	
55	0	114° 1'	112° 4'	111° 4'	113° 3'	111° 1'	131° 0'	125° 7'	112° 0'	112° 0'	113° 2'	114° 5'	
One Scale Division = '00087.													
M.	S.	HORIZONTAL FORCE.											
0	0	629° 0'	613° 0'	605° 0'	619° 0'	619° 0'	604° 5'	590° 0'	591° 4'	611° 0'	610° 0'	614° 2'	
5	0	626° 0'	615° 0'	607° 0'	619° 0'	618° 0'	601° 0'	599° 5'	596° 0'	611° 7'	610° 3'	616° 2'	
10	0	625° 0'	617° 0'	611° 0'	619° 0'	618° 0'	597° 5'	598° 0'	598° 8'	610° 2'	609° 4'	614° 4'	
15	0	618° 0'	614° 0'	614° 4'	619° 0'	619° 0'	594° 0'	598° 0'	602° 0'	610° 4'	610° 0'	612° 0'	
20	0	614° 8'	614° 0'	616° 6'	618° 0'	619° 0'	591° 0'	597° 0'	602° 6'	611° 2'	608° 0'	612° 4'	
25	0	613° 0'	611° 0'	616° 8'	617° 0'	619° 0'	589° 0'	596° 2'	602° 8'	611° 7'	607° 4'	611° 8'	
30	0	614° 5'	611° 8'	616° 8'	618° 0'	620° 0'	588° 2'	593° 3'	603° 0'	612° 3'	607° 4'	612° 0'	
35	0	617° 8'	612° 0'	617° 8'	617° 1'	618° 0'	591° 0'	587° 6'	602° 8'	610° 2'	607° 4'	613° 2'	
40	0	620° 0'	606° 0'	617° 7'	617° 0'	615° 0'	595° 0'	585° 8'	607° 2'	612° 0'	610° 2'	612° 4'	
45	0	616° 0'	606° 0'	618° 8'	616° 1'	612° 3'	592° 0'	588° 0'	610° 0'	612° 4'	612° 2'	611° 8'	
50	0	618° 4'	601° 8'	620° 0'	616° 9'	610° 0'	593° 0'	591° 2'	612° 0'	611° 0'	612° 8'	612° 2'	
55	0	616° 5'	601° 2'	620° 1'	618° 0'	608° 0'	592° 0'	591° 6'	612° 4'	611° 4'	610° 5'	612° 2'	
Thermometer													
		53° 5'	53° 7'	54° 0'	54° 1'	54° 5'	55° 0'	54° 7'	54° 3'	54° 0'	53° 7'	54° 0'	
One Scale Division = '000063.													
M.	S.	VERTICAL FORCE.											
0	0	206° 2'	207° 0'	206° 3'	204° 4'	204° 2'	203° 9'	204° 3'	205° 1'	201° 4'	204° 8'	203° 6'	
5	0	205° 9'	207° 0'	206° 3'	204° 5'	204° 2'	204° 7'	204° 3'	205° 0'	201° 5'	204° 7'	203° 6'	
10	0	205° 7'	207° 6'	206° 8'	204° 7'	204° 2'	204° 7'	202° 4'	205° 3'	202° 1'	205° 7'	203° 6'	
15	0	205° 0'	207° 6'	206° 8'	204° 7'	204° 2'	205° 5'	201° 7'	206° 1'	202° 2'	205° 1'	203° 6'	
20	0	205° 9'	207° 6'	206° 8'	204° 2'	204° 2'	205° 5'	201° 7'	205° 4'	204° 6'	204° 1'	203° 3'	
25	0	204° 3'	206° 7'	205° 5'	204° 2'	204° 2'	205° 2'	201° 6'	205° 4'	204° 1'	203° 2'	203° 3'	
30	0	204° 3'	206° 7'	205° 5'	204° 2'	204° 8'	206° 2'	201° 3'	205° 5'	204° 0'	203° 4'	203° 1'	
35	0	204° 7'	206° 7'	205° 3'	204° 2'	204° 8'	206° 2'	201° 3'	203° 1'	205° 1'	203° 4'	203° 1'	
40	0	204° 7'	206° 7'	205° 3'	204° 2'	204° 8'	206° 5'	201° 6'	202° 3'	205° 0'	203° 4'	203° 9'	
45	0	204° 7'	206° 7'	204° 7'	204° 2'	204° 8'	204° 6'	203° 9'	201° 7'	205° 0'	203° 4'	203° 9'	
50	0	206° 5'	207° 7'	204° 7'	204° 2'	204° 8'	205° 4'	203° 8'	201° 4'	204° 8'	203° 4'	203° 9'	
55	0	206° 5'	207° 7'	204° 7'	204° 2'	204° 8'	205° 4'	205° 0'	201° 5'	204° 7'	203° 6'	203° 9'	
Thermometer													
		53° 5'	53° 2'	54° 2'	54° 4'	54° 4'	55° 2'	55° 2'	55° 0'	54° 5'	54° 2'	54° 6'	
Increasing Numbers denote decreasing westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.				
			Dry.	Wet.	Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°	°	°	°						
21	10	0	29° 756	40° 2'	37° 2'	37° 0'	37° 0'	W. by S.	Light.	Generally clouded; cir.-cum. and cir.-strat.			
	11	0	29° 754	39° 7'	37° 0'	36° 5'	36° 5'	—	Calm.	Generally clouded; cir.-cum. and cir.-strat.			
	12	0	29° 770	38° 9'	36° 5'	36° 5'	36° 5'	W.	Very light.	Clouded; cir.-cum. and cir.-strat.			
	13	0	29° 793	38° 1'	35° 3'	35° 3'	35° 3'	W. by S.	Very light.	Cloudy; cir.-cum. and strat.			
	14	0	29° 772	35° 5'	33° 4'	33° 4'	33° 4'	W. by S.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	15	0	29° 779	36° 1'	33° 9'	33° 9'	33° 9'	W.S.W.	Very light.	Cloudy; fine.			
	16	0	29° 765	37° 1'	34° 6'	34° 6'	34° 6'	W.S.W.	Very light.	Cloudy; cir.-cum. and strat.			
	17	0	29° 783	36° 9'	34° 0'	34° 0'	34° 0'	W.S.W.	Very light.	Cloudy; fine; cir.-cum. and haze.			
	18	0	29° 760	36° 5'	34° 0'	34° 0'	34° 0'	W.S.W.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	19	0	29° 752	36° 5'	34° 0'	34° 0'	34° 0'	W.S.W.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	20	0	29° 712	36° 9'	34° 4'	34° 4'	34° 4'	W.S.W.	Very light.	Cloudy; cir.-cum. and strat.			
	21	0	29° 676	37° 3'	35° 0'	35° 0'	35° 0'	W.S.W.	Very light.	Cloudy; fine, with haze.			

* At 22° 10', Thermometer of H. F., 52° 1'; of V. F., 52° 3'.

ON.	19 ^h .	20 ^h .
Sc. Div.	Sc. Div.	Sc. Div.
111 ^h 2	113 ^h 2	
111 ^h 3	111 ^h 2	
111 ^h 2	111 ^h 2	
111 ^h 8	111 ^h 0	
112 ^h 0	111 ^h 4	
112 ^h 8	111 ^h 8	
113 ^h 2	113 ^h 0	
113 ^h 2	113 ^h 4	
113 ^h 2	114 ^h 2	
113 ^h 4	114 ^h 5	
113 ^h 4	113 ^h 8	
113 ^h 2	114 ^h 5	

AL FORCE.

610 ^h 0	614 ^h 2
610 ^h 3	616 ^h 2
609 ^h 4	614 ^h 4
610 ^h 0	612 ^h 0
608 ^h 0	612 ^h 4
607 ^h 4	611 ^h 8
607 ^h 4	612 ^h 0
607 ^h 4	613 ^h 2
610 ^h 2	612 ^h 4
612 ^h 2	611 ^h 8
612 ^h 8	612 ^h 2
610 ^h 5	612 ^h 2

53^h7

FOUR.

204 ^h 8	203 ^h 6
204 ^h 7	203 ^h 6
205 ^h 7	203 ^h 6
205 ^h 1	203 ^h 6
204 ^h 1	203 ^h 3
203 ^h 2	203 ^h 3
203 ^h 4	203 ^h 1
203 ^h 4	203 ^h 1
198 ^h 5	197 ^h 0
196 ^h 9	190 ^h 9
194 ^h 0	193 ^h 0
189 ^h 7	193 ^h 0
203 ^h 6	203 ^h 9

54^h2

ing westerly Declination,

ir.-strat.
ir.-strat.

MAGNETICAL OBSERVATIONS.												October 21st and 22nd.	
DECLINATION.						Angular Value of one Scale Division = 0 ^h 721.							
21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
115 ^h 2	106 ^h 2	110 ^h 2	116 ^h 3	119 ^h 1	114 ^h 0	108 ^h 7	114 ^h 0	110 ^h 2	108 ^h 8	103 ^h 0	103 ^h 5	107 ^h 6	
116 ^h 0	105 ^h 6	110 ^h 8	117 ^h 4	117 ^h 7	113 ^h 0	108 ^h 0	111 ^h 4	109 ^h 4	107 ^h 2	102 ^h 8	103 ^h 0	109 ^h 0	
118 ^h 2	105 ^h 8	113 ^h 7	119 ^h 1	117 ^h 7	114 ^h 2	110 ^h 0	111 ^h 2	110 ^h 4	107 ^h 0	103 ^h 5	104 ^h 2	108 ^h 0	
119 ^h 4	105 ^h 0	115 ^h 9	117 ^h 4	117 ^h 0	113 ^h 8	110 ^h 6	112 ^h 0	111 ^h 0	108 ^h 0	106 ^h 2	104 ^h 1	109 ^h 0	
118 ^h 8	105 ^h 2	115 ^h 3	118 ^h 8	117 ^h 8	113 ^h 6	109 ^h 7	110 ^h 0	109 ^h 4	110 ^h 2	107 ^h 0	104 ^h 8	108 ^h 7	
119 ^h 0	103 ^h 5	115 ^h 9	117 ^h 9	117 ^h 9	112 ^h 0	115 ^h 0	110 ^h 2	108 ^h 8	107 ^h 2	107 ^h 5	104 ^h 2	108 ^h 8	
119 ^h 0	103 ^h 8	115 ^h 0	120 ^h 3	115 ^h 0	112 ^h 2	114 ^h 2	110 ^h 2	108 ^h 8	106 ^h 0	102 ^h 2	104 ^h 4	111 ^h 8	
118 ^h 8	102 ^h 1	117 ^h 1	116 ^h 8	113 ^h 8	113 ^h 9	110 ^h 0	108 ^h 8	107 ^h 7	108 ^h 4	105 ^h 4	104 ^h 0	112 ^h 0	
116 ^h 5	103 ^h 4	121 ^h 3	119 ^h 0	113 ^h 9	112 ^h 7	110 ^h 0	109 ^h 2	109 ^h 0	107 ^h 5	104 ^h 0	106 ^h 1	114 ^h 3	
112 ^h 4	106 ^h 0	119 ^h 4	118 ^h 1	114 ^h 7	112 ^h 0	112 ^h 0	107 ^h 6	110 ^h 2	105 ^h 5	104 ^h 8	106 ^h 5	114 ^h 1	
109 ^h 8	107 ^h 4	119 ^h 1	117 ^h 8	114 ^h 2	110 ^h 5	113 ^h 0	109 ^h 3	110 ^h 8	103 ^h 2	105 ^h 0	107 ^h 1	114 ^h 9	
106 ^h 8	108 ^h 7	118 ^h 7	118 ^h 3	114 ^h 0	110 ^h 5	113 ^h 3	111 ^h 0	111 ^h 8	103 ^h 5	103 ^h 0	108 ^h 5	114 ^h 4	

HORIZONTAL FORCE.												Increase, in Scale Divisions, corresponding to 1 ^h decrease of Temperature, 1 ^h 63.	
610 ^h 4	594 ^h 6	620 ^h 6	620 ^h 2	618 ^h 2	599 ^h 0	591 ^h 0	584 ^h 0	584 ^h 3	587 ^h 0	585 ^h 6	595 ^h 3	618 ^h 8	
610 ^h 0	595 ^h 8	618 ^h 8	618 ^h 0	614 ^h 0	597 ^h 1	588 ^h 0	579 ^h 0	581 ^h 3	580 ^h 2	591 ^h 2	598 ^h 0	619 ^h 1	
607 ^h 2	593 ^h 4	620 ^h 7	619 ^h 5	615 ^h 5	595 ^h 8	587 ^h 5	584 ^h 0	581 ^h 0	578 ^h 0	591 ^h 2	599 ^h 2	621 ^h 4	
604 ^h 8	596 ^h 8	618 ^h 2	616 ^h 2	613 ^h 8	600 ^h 0	590 ^h 0	590 ^h 4	582 ^h 2	576 ^h 8	603 ^h 8	601 ^h 5	611 ^h 5	
606 ^h 0	596 ^h 2	618 ^h 5	618 ^h 0	612 ^h 8	602 ^h 0	585 ^h 5	590 ^h 2	580 ^h 3	574 ^h 0	601 ^h 2	603 ^h 0	611 ^h 8	
606 ^h 6	601 ^h 0	620 ^h 3	616 ^h 8	612 ^h 0	603 ^h 0	577 ^h 5	589 ^h 2	576 ^h 8	578 ^h 2	611 ^h 8	608 ^h 8	607 ^h 1	
606 ^h 8	597 ^h 5	616 ^h 2	619 ^h 1	612 ^h 0	605 ^h 4	583 ^h 0	592 ^h 0	572 ^h 0	578 ^h 0	599 ^h 6	604 ^h 8	610 ^h 2	
604 ^h 2	611 ^h 2	620 ^h 0	619 ^h 8	611 ^h 0	600 ^h 0	581 ^h 2	591 ^h 0	569 ^h 2	580 ^h 5	598 ^h 2	605 ^h 0	614 ^h 2	
600 ^h 8	613 ^h 4	621 ^h 2	618 ^h 8	610 ^h 2	595 ^h 0	585 ^h 6	593 ^h 8	571 ^h 0	583 ^h 8	596 ^h 5	608 ^h 2	614 ^h 0	
594 ^h 6	616 ^h 1	622 ^h 2	618 ^h 7	606 ^h 5	597 ^h 0	591 ^h 5	589 ^h 4	573 ^h 2	586 ^h 0	594 ^h 7	611 ^h 2	611 ^h 8	
600 ^h 0	619 ^h 8	622 ^h 6	619 ^h 1	601 ^h 2	595 ^h 0	593 ^h 6	587 ^h 0	575 ^h 8	585 ^h 6	599 ^h 5	616 ^h 2	616 ^h 4	
599 ^h 2	620 ^h 2	621 ^h 8	617 ^h 5	601 ^h 0	596 ^h 0	589 ^h 2	587 ^h 4	577 ^h 4	583 ^h 4	597 ^h 2	618 ^h 8	616 ^h 5	
54 ^h 0	54 ^h 2	54 ^h 2	54 ^h 0	53 ^h 6	52 ^h 7	53 ^h 0	53 ^h 0	53 ^h 0	52 ^h 8	52 ^h 6	52 ^h 4	52 ^h 1 ^a	

VERTICAL FORCE.												Increase, in Scale Divisions, corresponding to 1 ^h decrease of Temperature, 1 ^h 64.	
203 ^h 4	186 ^h 7	193 ^h 0	197 ^h 7	200 ^h 4	200 ^h 9	202 ^h 5	202 ^h 7	201 ^h 8	211 ^h 4	202 ^h 6	207 ^h 2	208 ^h 7	
201 ^h 9	184 ^h 9	194 ^h 9	198 ^h 0	200 ^h 6	200 ^h 9	202 ^h 5	202 ^h 7	202 ^h 0	211 ^h 6	202 ^h 6	208 ^h 5	209 ^h 7	
200 ^h 9	184 ^h 2	194 ^h 8	198 ^h 5	199 ^h 0	200 ^h 7	203 ^h 2	203 ^h 4	202 ^h 2	212 ^h 4	205 ^h 2	207 ^h 4	209 ^h 7	
200 ^h 9	185 ^h 1	194 ^h 1	197 ^h 7	199 ^h 0	200 ^h 7	203 ^h 2	204 ^h 6	201 ^h 6	211 ^h 0	208 ^h 9	208 ^h 3	209 ^h 0	
200 ^h 5	184 ^h 2	195 ^h 4	198 ^h 9	199 ^h 0	201 ^h 1	202 ^h 4	204 ^h 4	203 ^h 1	210 ^h 3	208 ^h 8	207 ^h 5	209 ^h 0	
200 ^h 1	187 ^h 7	196 ^h 2	199 ^h 5	199 ^h 0	203 ^h 9	201 ^h 0	203 ^h 2	203 ^h 9	211 ^h 3	209 ^h 8	209 ^h 1	208 ^h 7	
200 ^h 1	189 ^h 7	196 ^h 2	200 ^h 9	201 ^h 4	204 ^h 0	202 ^h 9	202 ^h 7	203 ^h 5	211 ^h 3	208 ^h 6	207 ^h 8	210 ^h 2	
198 ^h 5	191 ^h 5	197 ^h 0	200 ^h 5	201 ^h 3	203 ^h 5	204 ^h 0	202 ^h 6	204 ^h 6	210 ^h 1	207 ^h 5	208 ^h 4	211 ^h 7	
196 ^h 9	190 ^h 9	197 ^h 3	201 ^h 9	201 ^h 3	203 ^h 5	203 ^h 9	203 ^h 1	206 ^h 5	210 ^h 1	207 ^h 5	208 ^h 0	210 ^h 8	
194 ^h 0	193 ^h 0	197 ^h 3	203 ^h 2	201 ^h 3	204 ^h 2	204 ^h 8	202 ^h 6	207 ^h 4	209 ^h 5	207 ^h 5	208 ^h 8	209 ^h 9	
189 ^h 7	193 ^h 0	196 ^h 6	203 ^h 0	201 ^h 4	203 ^h 2	203 ^h 1	202 ^h 6	208 ^h 5	209 ^h 1	208 ^h 3	208 ^h 7	210 ^h 5	
189 ^h 7	193 ^h 0	197 ^h 5	200 ^h 6	201 ^h 4	204 ^h 1	202 ^h 7	202 ^h 0	209 ^h 4	207 ^h 5	208 ^h 3	210 ^h 0	210 ^h 1	
54 ^h 4	54 ^h 6	54 ^h 7	53 ^h 7	53 ^h 0	53 ^h 3	53 ^h 4	53 ^h 3	53 ^h 8	53 ^h 2	53 ^h 0	52 ^h 6	52 ^h 4 ^a	

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
P.	H.	M.	In.	Dry.	Wet.	Direction.	Force.				
21	22	0	29°644	38°1	35°7	S.W.	Moderate.	Cloudy; fine, with haze.			
	23	0	29°617	38°1	35°9	S.S.W.	Moderate.	Cloudy; fine, with haze.			
22	0	0	29°587	37°9	36°1	S.S.W.	Nearly calm.	Generally cloudy.			
	1	0	29°581	37°7	35°9	S.S.W.	Nearly calm.	Generally cloudy.			
	2	0	29°557	37°9	36°3	S.S.W.	Nearly calm.	Cloudy, but fine.			
	3	0	29°538	37°9	36°8	W.S.W.	Nearly calm.	Cloudy; fine; cir.-cum. and haze.			
	4	0	29°538	38°1	36°2	N. by W.	Moderate.	Cloudy; fine; cir.-cum. and haze.			
	5	0	29°587	38°1	35°5	N. by W.	Brisk, with gusts.	Generally cloudy.			
	6	0	29°609	37°3	34°6	N. by W.	Brisk, with gusts.	Cloudy, with haze.			
	7	0	29°638	38°1	33°8	N. by W.	Brisk, with gusts.	Cloudy, with cir. and haze.			
	8	0	29°674	37°3	33°8	N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.			
	9	0	29°726	35°5	32°6	N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.			

November 27th and 28th.		MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.	
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	S. Div.	Sc. Div.	S. Div.	Sc. Div.	S. Div.	Sc. Div.	S. Div.	Sc. Div.	S. Div.	Sc. Div.	S. Div.	Sc. Div.
0	0	112°0	110°0	109°2	140°0	118°2	117°2	120°0	116°5	116°2	110°4	109°2	
5	0	112°2	110°0	111°2	140°3	117°0	118°8	120°3	116°2	114°6	110°8	109°0	
10	0	112°2	108°8	110°3	135°6	116°0	119°7	118°4	115°3	115°0	112°0	109°5	
15	0	111°4	110°2	113°3	132°4	117°1	119°4	115°9	115°0	114°1	113°8	111°1	
20	0	110°0	109°8	112°6	132°0	116°7	120°0	115°3	114°7	113°9	114°0	110°9	
25	0	111°2	110°0	113°0	126°8	115°2	120°2	115°4	114°1	113°6	113°2	108°7	
30	0	110°3	110°0	111°3	124°8	113°8	122°5	115°2	113°9	113°2	113°8	108°0	
35	0	111°0	110°0	112°0	125°4	113°2	126°2	115°7	114°6	112°8	112°7	109°0	
40	0	111°2	111°7	115°0	126°2	113°3	124°2	115°1	114°4	111°3	112°5	109°6	
45	0	111°0	112°4	117°2	127°0	115°0	121°8	114°9	115°0	110°0	112°8	107°8	
50	0	110°2	112°2	121°2	124°3	115°0	117°0	115°0	115°2	109°6	112°1	108°7	
55	0	110°0	110°7	127°2	122°0	116°3	114°4	115°3	115°9	110°4	111°2	109°0	
M. S.		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.	
		637°0	636°0	619°0	622°2	628°4	620°1	641°4	622°2	626°2	624°0	628°0	
0	0	637°0	636°0	619°0	622°2	628°4	620°1	641°4	622°2	626°2	624°0	628°0	
5	0	637°2	636°2	619°8	634°2	625°8	622°2	643°4	623°5	625°2	623°2	627°5	
10	0	637°0	632°0	619°7	638°4	622°2	622°3	646°0	625°2	625°0	623°0	624°5	
15	0	641°2	631°2	617°0	637°0	624°0	620°2	641°0	625°2	626°6	624°0	622°0	
20	0	642°0	631°6	618°3	637°2	622°2	620°4	640°8	626°2	626°1	624°0	620°0	
25	0	641°2	629°2	616°4	636°2	624°8	632°6	635°0	627°8	625°2	623°0	618°0	
30	0	638°6	627°4	615°3	635°0	625°7	642°8	632°2	626°0	626°0	625°0	618°2	
35	0	638°0	624°8	615°0	635°4	626°0	645°8	631°0	625°2	627°2	625°0	624°8	
40	0	638°3	623°0	617°5	632°2	625°6	640°5	628°5	625°0	628°0	626°8	625°0	
45	0	639°4	622°2	618°2	630°8	620°2	640°8	624°0	623°2	625°2	628°8	623°0	
50	0	637°0	622°2	616°2	631°1	620°8	638°2	621°6	623°2	624°2	630°0	622°0	
55	0	635°2	620°8	616°0	630°0	620°0	634°2	620°8	623°5	624°0	631°2	621°8	
Thermometer		42°7	43°0	44°0	44°2	44°4	44°8	45°6	46°4	46°8	46°2	46°5	
M. S.		One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.	
		221°1	218°0	216°2	218°2	215°4	212°8	201°4	205°4	207°4	205°7	204°6	
0	0	221°1	218°0	216°2	218°2	215°4	212°8	201°4	205°4	207°4	205°7	204°6	
5	0	220°6	218°4	216°2	217°4	215°4	212°0	202°7	205°8	207°4	204°9	204°6	
10	0	220°4	218°6	214°2	216°7	215°6	210°8	202°3	206°8	207°5	204°7	204°6	
15	0	220°3	216°4	215°1	216°7	215°7	209°6	201°2	206°7	208°2	204°6	204°6	
20	0	220°4	216°3	215°4	218°1	215°7	208°2	201°2	206°6	206°7	204°6	204°6	
25	0	220°4	216°3	216°6	215°3	215°3	209°6	200°7	206°6	206°7	204°6	203°1	
30	0	220°2	216°2	216°4	215°3	215°3	205°0	201°1	206°2	208°0	204°6	203°1	
35	0	220°8	215°7	218°1	215°0	215°3	205°3	201°8	206°5	208°9	204°9	203°3	
40	0	220°5	215°6	218°3	215°0	214°6	200°9	202°5	206°0	206°9	204°9	203°2	
45	0	221°4	216°2	218°7	215°0	214°6	200°8	202°9	206°0	207°1	204°9	202°6	
50	0	221°1	216°2	218°0	215°4	214°1	200°8	204°0	205°6	206°2	205°6	202°6	
55	0	218°1	217°4	218°0	215°4	213°3	198°5	204°8	206°4	206°4	205°5	202°6	
Thermometer		42°0	43°1	43°6	44°0	44°7	45°2	46°4	47°3	47°2	47°3	47°5	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Gottingen Time.			Thermometers.			Wind.		Weather.					
			Baromet.	Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	"								
27	10	0	29°429	33°7	30°7	S.E. by S.	Light.	Cloudy; cum-strat. and cir.-cum.					
	11	0	29°395	34°7	31°7	S.E. by S.	Moderate, with gusts.	Cloudy; cum-strat.					
	12	0	29°367	36°1	31°8	S.S.W.	Brisk.	Cloudy; fine.					
	13	0	29°373	36°1	32°7	S.S.W.	Fresh.	Cloudy; fine.					
	14	0	29°364	35°2	32°9	S.S.W.	Brisk, with gusts.	Cloudy; fine.					
	15	0	29°359	35°2	33°0	S.W.	Brisk.	Cloudy, with haze.					
	16	0	29°356	34°1	32°9	S.W.	Moderate, with gusts.	Cloudy; mist and rain.					
	17	0	29°334	34°9	34°0	S.W.	Light.	Cloudy, with rain.					
	18	0	29°337	35°7	34°7	S.W.	Very light.	Cloudy; mist and rain.					
	19	0	29°326	35°6	34°6	—	Calm.	Mist, and occasional rain.					
	20	0	29°338	35°3	34°4	—	Calm.	Cloudy, with showers of rain.					
	21	0	29°331	35°4	34°5	—	Calm.	Cloudy, with rain.					

* At 28° 10', Thermometer of H. F., 51° 51' of V. F., 51° 2.

November 27th and 28th.

Angular Value of one Scale Division = 0.721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
107.5	107.8	106.1	111.0	113.1	114.4	118.8	117.1	115.5	109.1	111.9	105.2	108.0
112.0	106.2	106.8	113.0	113.2	115.0	118.0	117.2	113.9	110.1	111.0	105.0	108.0
112.8	105.8	108.0	112.0	111.2	115.0	118.4	118.8	112.6	111.2	110.0	105.0	108.2
113.0	107.0	108.2	112.8	111.5	115.2	118.0	117.8	112.6	112.0	109.9	103.0	108.8
111.1	107.0	109.3	112.0	116.0	115.0	117.6	116.2	112.0	112.2	108.9	107.0	108.4
111.5	105.0	110.0	111.0	111.4	113.8	118.8	117.8	111.0	112.2	108.4	107.0	108.0
111.3	106.0	109.0	111.7	114.0	116.0	118.8	118.0	112.8	110.9	107.4	107.5	109.0
111.7	105.8	109.8	109.0	111.6	112.4	118.8	115.3	113.5	112.8	108.9	107.6	108.8
111.7	107.2	109.0	113.0	111.0	116.0	118.0	116.4	111.8	111.1	107.2	107.9	108.2
111.1	108.0	108.8	111.0	113.2	116.0	118.7	117.2	110.0	112.8	105.0	107.8	108.8
109.8	107.5	111.1	114.8	114.0	117.2	117.6	114.2	109.4	113.0	106.0	108.0	108.7
110.0	105.3	111.0	114.0	113.8	118.6	118.4	115.1	109.5	112.0	105.2	107.8	109.7

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

621°5	620°0	631°1	634°5	631°0	626°0	621°2	617°9	611°0	604°0	611°5	614°0	607°5
625°0	614°0	629°5	637°0	632°5	623°2	623°3	617°4	611°5	601°2	614°0	610°4	612°0
629°2	616°8	631°0	633°0	631°6	623°4	622°0	619°6	619°0	605°0	610°8	607°5	613°0
630°0	620°4	629°5	634°2	632°0	622°2	621°5	618°8	610°2	608°0	611°0	606°0	614°0
630°0	623°0	628°2	634°5	632°6	621°4	620°2	613°5	603°2	607°2	609°0	609°8	612°0
631°0	624°0	631°0	632°5	631°3	621°3	621°2	617°2	605°2	606°3	609°4	612°0	612°5
631°0	621°0	634°2	634°0	628°2	624°2	621°4	619°3	608°2	603°0	600°0	612°0	616°1
630°8	620°0	633°0	638°5	628°7	620°2	610°3	615°1	614°0	603°5	609°0	611°0	614°5
630°8	623°0	634°0	630°0	628°0	625°0	620°0	620°7	607°0	608°2	612°0	609°2	615°0
631°2	626°0	634°0	630°0	626°2	623°2	620°4	614°2	609°2	609°2	611°4	608°0	615°5
626°0	628°0	635°0	630°5	623°0	622°3	620°8	613°8	603°5	610°0	608°2	607°3	618°0
625°8	630°0	637°0	631°0	623°6	623°0	618°5	615°2	606°2	608°0	611°0	610°3	620°0

46°8	48°4	48°9	49°4	49°4	49°4	49°6	49°6	49°6	49°8	49°9	50°5	51°2*
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Increase, in Scale Divisions, corresponding to 1° decrease of Temperature 1'64.

2003	1987	1984	2010	2024	2005	2000	2022	2028	2031	2055	2041	2037
1997	1981	1984	2010	2030	2004	2015	2030	2034	2034	2059	2041	2037
1997	1973	1984	2010	2030	2004	2015	2030	2022	2031	2059	2037	2047
1996	1973	1994	2010	2015	2011	2015	2030	2022	2035	2059	2037	2047
2002	1973	1998	2010	2016	2007	2015	2015	2020	2048	2059	2037	2047
2002	1966	2003	2010	2015	2002	2012	2015	2027	2044	2059	2048	2044
2002	1965	2003	2016	2002	2001	2012	2015	2031	2015	2051	2048	2051
2006	1965	2002	2004	2007	2006	2019	2025	2035	2045	2051	2037	2051
2006	1954	2003	2018	2008	2001	2019	2033	2037	2051	2051	2039	2051
2007	1965	2001	2018	2012	2003	2019	2034	2028	2055	2045	2037	2045
2002	1982	2010	2024	2002	2007	2019	2025	2028	2055	2059	2037	2045
2002	1984	2010	2024	2009	2010	2019	2034	2028	2055	2059	2037	2045

48'4	49'0	49'2	49'3	49'2	50'5	50'5	49'5	49'4	49'8	49'4	50'0	50'6 ^a
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS

Mean Göttingen Time.			Barometer at 32"	Thermometers.		Wind.		Weather.
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
27	22	0	29°327	36°7	35°9	—	Calm.	Cloudy; cum.-strat. and cir.-cum.
	23	0	29°329	37°3	36°2	—	Calm.	Cloudy, with haze.
28	0	0	29°350	37°3	36°2	—	Calm.	Cloudy; cir.-cum. and strat.
	1	0	29°366	36°9	35°7	—	Calm.	Cloudy; cir.-cum. and strat.
	2	0	29°384	38°3	36°0	S.W.	Light.	Cloudy; cir.-strat.
	3	0	29°437	38°0	35°8	S.W. by W.	Very light.	Cloudy; cir.-strat. and haze.
	4	0	29°475	38°5	36°5	S.W. by W.	Very light.	Cloudy, with haze.
	5	0	29°483	40°3	37°7	S.W. by W.	Light.	Cloudy; cir.-cum. and strat.
	6	0	29°498	41°9	37°9	W. by S.	Light.	Cloudy, with cir.-cum.
	7	0	29°506	43°0	38°6	W.S.W.	Light	Clear; cir.-strat.
	8	0	29°514	43°7	39°1	W.S.W.	Brisk.	Clear; cir.-strat.
	9	0	29°521	42°6	38°1	W.S.W.	Moderate, with gusts.	Cloudy; cir.-strat.

December 23rd and 24th.				MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.				Angular Value of one Scale division = 0'721.								DECLINATION.			
				10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
0	0	107°0	107°5	110°1	134°0	123°9	123°8	122°7	118°2	114°0	113°2	116°7			
5	0	109°2	109°2	110°3	138°0	123°8	122°0	121°7	118°0	113°2	113°3	116°4			
10	0	113°8	108°4	111°1	132°0	125°8	122°2	120°0	119°0	113°4	114°0	116°6			
15	0	117°6	107°0	113°8	131°2	127°1	123°6	120°2	117°3	113°9	114°2	116°0			
20	0	120°1	104°7	115°2	131°5	125°8	128°0	123°0	115°0	113°9	114°3	116°2			
25	0	122°9	105°3	115°7	140°9	121°8	130°0	123°0	115°4	113°5	114°4	116°4			
30	0	125°1	105°8	116°1	141°1	121°0	128°8	121°2	115°2	114°0	115°2	116°4			
35	0	127°3	105°3	115°4	138°7	124°0	129°4	119°0	115°0	113°9	115°2	116°3			
40	0	128°0	107°1	114°2	131°3	125°8	131°2	123°8	114°3	113°8	115°2	116°0			
45	0	119°8	109°0	116°3	126°2	126°0	131°8	123°2	114°8	114°1	115°8	116°2			
50	0	112°9	109°0	119°9	125°7	126°1	131°0	120°5	114°0	113°9	115°4	116°2			
55	0	110°0	108°8	127°0	122°0	126°3	125°0	120°3	113°9	113°2	116°2	115°8			
One Scale Division = '00087.															
HORIZONTAL FORCE.															
M.	S.	623°0	631°1	629°0	587°0	611°0	617°5	623°0	635°0	636°5	636°5	633°0			
0	0	623°0	629°7	627°6	592°0	611°0	615°2	619°5	631°5	636°0	636°1	633°4			
5	0	620°8	635°0	628°0	588°0	614°1	615°0	616°0	633°0	634°0	626°2	633°6			
10	0	620°0	635°1	627°9	585°5	615°0	616°0	620°0	637°0	636°5	636°0	633°8			
15	0	622°8	631°0	627°8	594°7	618°4	614°8	626°0	638°0	638°0	635°2	633°7			
20	0	628°8	631°8	627°0	601°9	620°0	617°0	634°0	637°0	637°0	634°6	635°0			
25	0	626°1	633°6	626°9	619°0	625°0	618°0	636°5	635°0	638°0	634°4	634°6			
30	0	626°5	631°6	626°8	620°0	627°2	619°0	631°0	636°0	637°0	635°0	635°0			
35	0	628°2	631°1	621°6	618°4	623°0	621°0	636°0	637°0	636°0	635°2	633°2			
40	0	631°1	631°5	610°2	616°0	622°5	621°4	640°0	638°0	637°0	635°0	633°0			
45	0	629°0	631°7	601°0	617°2	621°8	623°0	637°5	637°0	637°2	635°0	634°2			
50	0	629°0	630°0	591°0	615°0	618°2	625°0	641°0	636°5	637°0	634°7	634°2			
Thermometer		41°3	41°3	42°0	41°8	41°4	41°6	42°0	42°1	42°0	42°0	42°3			
One Scale Division = 0'00063.															
VERTICAL FORCE.															
M.	S.	219°6	218°1	217°4	222°9	215°8	215°2	213°0	198°9	208°0	209°1	206°9			
0	0	219°6	218°1	217°4	222°9	215°8	215°2	213°0	198°9	208°0	209°1	206°9			
5	0	220°2	218°2	217°2	222°7	215°6	215°3	211°4	200°1	208°0	209°1	207°1			
10	0	219°8	218°0	216°9	219°1	219°7	215°5	210°2	200°8	208°1	207°8	207°3			
15	0	219°8	218°0	216°6	218°6	219°7	215°5	208°0	201°3	209°2	207°7	207°2			
20	0	219°1	218°3	216°5	219°0	220°6	215°3	204°8	202°1	209°2	207°6	207°3			
25	0	219°9	218°5	216°0	219°3	220°9	215°3	204°6	202°8	209°2	207°8	207°3			
30	0	219°0	217°4	216°0	220°8	219°9	214°0	201°8	203°0	209°2	207°7	207°4			
35	0	218°1	218°6	216°0	219°1	219°9	214°1	203°4	205°3	209°2	207°4	207°4			
40	0	218°6	218°3	216°3	215°9	219°9	214°0	202°7	206°0	209°2	207°5	207°0			
45	0	218°6	217°7	215°1	215°8	216°2	214°0	201°1	206°8	209°4	207°6	207°0			
50	0	218°5	218°0	220°1	215°8	215°5	214°0	200°2	206°8	209°2	207°5	207°1			
55	0	218°5	217°3	221°0	215°8	215°5	214°1	200°2	208°0	209°2	207°3	207°0			
Thermometer		40°0	41°0	41°6	41°5	40°8	41°4	42°0	42°4	42°2	42°2	42°9			
Increasing numbers denote decreasing Westerly Declination.															
METEOROLOGICAL OBSERVATIONS.															
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.							
				Dry.	Wet.	Direction.	Force.								
D.	H.	M.	In.	"											
23	10	0	30°184	23°9	21°4	—	Calm.	Clouded; cir.-cum. and haze.							
	11	0	30°148	15°8	15°7	—	Calm.	Cloudy; cir.-cum.							
	12	0	30°155	13°7	13°4	—	Calm.	Cloudy; cir.-cum.							
	13	0	30°157	17°6	16°9	—	Calm.	Cloudy, with haze.							
	14	0	30°146	16°7	16°4	—	Calm.	Cloudy; cir.-cum. and haze.							
	15	0	30°126	19°5	18°8	—	Calm.	Cloudy, with haze.							
	16	0	30°097	16°2	15°6	—	Calm.	Cloudy; cir.-cum.; aurora.							
	17	0	30°069	12°6	12°6	—	Calm.	Cloudy; cir.-cum. and haze; aurora visible.							
	18	0	30°035	13°7	13°6	—	Calm.	Cloudy; cir.-cum. and haze.							
	19	0	30°021	15°6	15°0	—	Calm.	Cloudy, with haze.							
	20	0	30°011	15°5	15°2	—	Calm.	Cloudy, with haze.							
	21	0	29°992	15°6	15°2	—	Calm.	Cloudy; cir.-cum. and haze.							

* At 24° 10'. Thermometer of H. F., 44° 8'; of V. F., 44° 5'.

MAGNETICAL OBSERVATIONS.

December 23rd and 24th.

DECLINATION.

Angular Value of One Scale Division = 0' 721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
113° 2	111° 0	109° 2	111° 2	116° 5	118° 1	117° 4	120° 0	115° 0	112° 0	110° 0	109° 2	110° 4
113° 3	110° 0	109° 4	111° 8	116° 8	115° 4	117° 8	120° 1	113° 9	111° 8	110° 3	110° 2	111° 2
114° 0	110° 0	111° 0	111° 9	116° 0	117° 1	118° 7	118° 0	113° 7	111° 5	109° 4	109° 7	112° 0
114° 2	110° 0	110° 7	111° 8	115° 1	117° 0	116° 0	116° 8	113° 6	110° 4	111° 0	108° 6	111° 8
114° 3	110° 8	110° 5	112° 0	114° 7	118° 2	118° 2	116° 6	113° 8	110° 8	109° 4	108° 2	112° 0
114° 4	110° 8	110° 2	112° 0	114° 2	118° 1	119° 7	118° 5	113° 0	109° 2	108° 0	108° 0	112° 0
115° 2	111° 0	109° 1	111° 8	114° 8	116° 2	119° 4	117° 0	113° 4	108° 6	108° 0	107° 4	111° 5
115° 2	111° 2	109° 0	112° 0	117° 0	117° 8	119° 0	116° 9	114° 3	108° 8	110° 2	107° 2	112° 4
115° 2	111° 5	111° 0	111° 5	117° 0	118° 7	119° 0	111° 2	112° 6	109° 0	109° 8	107° 0	112° 8
115° 8	110° 8	111° 8	113° 1	117° 4	119° 1	118° 1	113° 8	113° 0	110° 6	110° 0	108° 0	113° 2
115° 4	110° 2	110° 2	113° 6	117° 8	118° 3	117° 0	116° 0	113° 0	111° 2	109° 1	110° 0	113° 0
116° 2	110° 0	110° 2	115° 2	118° 0	118° 0	115° 1	116° 8	112° 4	111° 0	109° 7	110° 0	113° 5

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

634° 0	632° 6	632° 3	610° 0	612° 5	610° 2	635° 0	625° 0	620° 0	622° 2	616° 6	632° 2	633° 4
634° 0	633° 0	650° 5	610° 8	614° 3	639° 0	635° 2	621° 8	622° 0	618° 5	617° 2	632° 3	635° 0
631° 4	634° 0	634° 0	611° 6	613° 1	638° 0	633° 0	625° 0	625° 0	615° 5	620° 0	630° 0	634° 2
630° 0	631° 2	637° 5	610° 2	613° 7	639° 5	628° 2	625° 0	622° 5	616° 0	623° 2	631° 5	634° 9
630° 6	632° 0	638° 6	612° 0	638° 0	611° 2	627° 5	624° 0	619° 5	613° 5	623° 0	638° 0	637° 5
631° 0	632° 5	636° 5	612° 0	641° 5	638° 1	630° 0	621° 5	620° 0	613° 0	622° 4	635° 6	631° 8
631° 4	633° 0	636° 8	611° 0	640° 0	633° 0	630° 0	619° 0	620° 0	613° 0	622° 8	631° 5	638° 5
631° 0	631° 5	636° 5	613° 2	641° 6	636° 0	630° 0	619° 4	621° 2	613° 0	624° 0	632° 5	638° 8
630° 2	631° 8	637° 2	610° 4	640° 5	638° 4	630° 0	619° 4	621° 5	612° 5	630° 0	633° 0	637° 5
629° 4	632° 3	638° 0	639° 8	641° 0	610° 5	630° 0	624° 0	620° 5	617° 0	633° 2	630° 0	639° 8
633° 2	632° 2	638° 8	643° 2	640° 2	634° 2	628° 0	624° 0	623° 0	617° 4	629° 8	628° 6	642° 0
633° 0	632° 5	639° 2	642° 8	641° 0	636° 8	626° 0	623° 0	625° 0	617° 2	630° 6	626° 5	641° 2

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 61.

207° 0	205° 3	205° 4	208° 3	208° 3	207° 5	208° 5	209° 6	209° 5	208° 6	207° 8	206° 6	206° 3
207° 1	205° 0	205° 4	209° 2	208° 3	207° 4	208° 5	209° 1	209° 5	207° 2	207° 7	206° 5	206° 3
207° 3	205° 2	205° 4	208° 9	208° 9	207° 4	208° 8	209° 6	209° 1	207° 2	208° 4	208° 1	206° 0
207° 7	205° 2	207° 1	208° 9	208° 2	207° 4	208° 8	209° 4	208° 9	207° 2	208° 4	207° 7	206° 0
207° 6	205° 2	207° 1	208° 9	208° 5	207° 9	208° 8	209° 4	208° 9	207° 2	208° 1	207° 7	206° 0
207° 8	205° 2	207° 1	208° 9	208° 5	207° 9	208° 7	209° 4	208° 9	207° 2	207° 9	208° 1	206° 0
207° 7	205° 2	207° 3	208° 5	208° 5	208° 0	209° 6	209° 5	208° 6	207° 2	207° 9	207° 4	206° 1
207° 4	205° 8	207° 3	208° 5	208° 5	208° 1	209° 6	209° 3	208° 3	207° 2	207° 9	206° 2	206° 1
207° 4	205° 8	207° 3	208° 5	208° 1	208° 1	209° 7	209° 3	207° 6	207° 2	208° 1	206° 2	206° 1
207° 5	205° 8	208° 3	208° 1	207° 5	208° 5	209° 7	209° 7	207° 6	208° 2	208° 1	205° 5	206° 1
207° 5	205° 6	208° 3	208° 3	206° 4	208° 5	209° 7	209° 7	207° 6	208° 1	207° 1	205° 0	206° 1
207° 3	205° 2	208° 3	208° 2	208° 0	208° 5	209° 7	209° 5	208° 6	207° 8	207° 1	205° 0	206° 1

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.			Barometer at 30°.		Thermometers.		Wind.		Weather.	
D.	H.	M.	In.		Dry.	Wet.	Direction.	Force.		
23	22	0	29° 978	16° 6	16° 2	—	—	Calm.	Cloudy, cir-cum.	
	23	0	29° 897	21° 7	20° 5	—	—	Calm.	Cloudy, cir-cum.	
24	0	0	29° 873	27° 5	25° 6	S.S.E.	Very light.	Cloudy, cir-cum., cir-strat., and haze.		
	1	0	29° 841	28° 1	27° 1	S.S.E.	Very light.	Clouded, with haze.		
	2	0	29° 811	28° 8	27° 1	S. by E.	Very light.	Clouded, with cir-cum. and haze.		
	3	0	29° 800	29° 9	28° 3	S. by E.	Very light.	Cloudy, cir-cum., cir-strat., and haze.		
	4	0	29° 759	31° 2	28° 8	S. by E.	Very light.	Cloudy, with haze.		
	5	0	29° 711	33° 9	31° 1	S. by E.	Very light.	Cloudy, cir-cum. and haze.		
	6	0	29° 660	34° 1	31° 4	S.W. by W.	Very light.	Cloudy, cir-cum. and cir-strat.		
	7	0	29° 654	33° 9	31° 3	S.W. by W.	Very light.	Cloudy, cir-cum. and cir-strat.		
	8	0	29° 596	34° 4	31° 5	S.W. by W.	Very light.	Cloudy, with strat.		
	9	0	29° 584	34° 6	31° 9	S.W. by W.	Very light.	Cloudy, with strat.		

aurora visible.

January 20th and 21st.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0.721.									
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
M.	S.	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
0	0	113.7	113.0	112.1	111.0	109.3	107.4	105.0	102.8	100.0	97.0
5	0	113.6	112.9	112.0	110.9	109.2	107.3	104.9	102.7	100.0	97.0
10	0	112.5	111.1	110.0	108.9	107.2	105.3	102.9	100.7	98.0	95.0
15	0	112.4	111.0	109.9	108.8	107.1	105.2	102.8	100.6	97.9	95.0
20	0	112.2	110.9	109.8	108.7	107.0	105.1	102.7	100.5	97.8	95.0
25	0	113.4	112.2	111.2	110.0	108.3	106.4	104.0	101.8	99.0	96.0
30	0	113.2	111.1	110.0	108.9	107.2	105.3	102.9	100.7	98.0	95.0
35	0	112.9	111.0	110.0	108.9	107.2	105.3	102.9	100.7	98.0	95.0
40	0	112.5	111.1	110.0	108.9	107.2	105.3	102.9	100.7	98.0	95.0
45	0	112.0	110.0	109.0	108.0	107.0	106.0	105.0	104.0	103.0	102.0
50	0	112.4	110.2	109.2	108.2	107.2	106.2	105.2	104.2	103.2	102.2
55	0	112.8	111.0	110.0	109.0	108.0	107.0	106.0	105.0	104.0	103.0
One Scale Division = 0.000087 parts of the H. F.											
		HORIZONTAL FORCE.									
M.	S.	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
2	0	612.0	610.0	608.5	607.1	605.0	603.4	601.0	598.0	595.0	592.0
7	0	611.5	609.0	607.0	605.0	603.0	601.0	598.0	595.0	592.0	589.0
12	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
17	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
22	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
27	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
32	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
37	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
42	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
47	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
52	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
57	0	613.0	610.0	608.0	606.0	604.0	602.0	600.0	597.0	594.0	591.0
Thermometer		37.0	38.0	38.6	38.5	38.5	38.2	38.4	38.0	38.4	38.6
One Scale Division = 0.000053 parts of the V. F.											
		VERTICAL FORCE.									
M.	S.	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
3	0	214.9	213.9	212.3	210.4	209.0	208.8	210.2	209.4	208.4	207.6
8	0	214.2	213.3	212.5	210.4	209.1	208.8	210.2	209.1	208.4	207.6
13	0	214.2	213.6	212.6	210.5	209.1	208.8	210.3	209.1	208.4	207.6
18	0	213.6	213.4	212.1	210.5	209.1	208.8	210.4	209.0	208.4	207.6
23	0	213.6	212.4	210.7	210.2	208.8	208.8	210.4	208.9	208.0	207.3
28	0	213.6	212.0	211.2	210.3	208.8	209.0	210.4	208.9	208.0	207.4
33	0	213.6	212.1	210.8	210.0	208.8	209.3	210.4	208.9	208.0	207.2
38	0	213.4	212.1	210.7	210.6	208.8	209.4	209.6	208.0	207.5	206.8
43	0	213.3	212.1	210.7	210.8	208.7	209.4	209.6	207.6	207.3	206.6
48	0	213.7	211.4	210.3	210.4	208.7	210.2	209.4	209.6	207.6	206.8
53	0	214.3	211.8	210.3	210.4	208.7	210.2	209.4	208.4	207.6	206.7
58	0	214.5	211.8	210.3	210.4	208.7	210.2	209.4	208.4	207.6	206.7
Thermometer		36.8	38.1	39.2	40.0	39.9	39.9	39.7	39.4	39.6	40.0
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
D.	H.	M.									
20	10	0	29.918	21.3	17.8	W.S.W.	Light.	Clear; cir.			
	11	0	29.922	20.0	17.4	W.S.W.	Light.	Clear; cir.			
	12	0	29.919	19.4	17.2	W.S.W.	Moderate.	Clear; halo round the moon.			
	13	0	29.917	18.9	16.7	W.S.W.	Moderate, with gusts.	Clear; halo round the moon.			
	14	0	29.905	18.4	16.4	W.S.W.	Moderate.	Clear.			
	15	0	29.905	16.9	15.6	W.S.W.	Moderate.	Clear; cir.			
	16	0	29.887	16.9	15.7	W.S.W.	Light.	Clear; scattered cir.			
	17	0	29.865	15.3	14.4	W.S.W.	Light.	Clear; cir.			
	18	0	29.849	14.4	13.3	W.S.W.	Light.	Clear.			
	19	0	29.835	13.5	12.6	W.S.W.	Light.	Clear.			
	20	0	29.850	14.5	13.3	W.S.W.	Very light (nearly calm).	Cloudy; cir			
	21	0	29.810	14.0	13.2	W. by N.	Very light (nearly calm).	Cloudy; cir.			

* At 21° 10', Thermometer of H. F., 35° 4'; of V. F., 56° 2'.

MAGNETICAL OBSERVATIONS.

January 20th and 21st.

DECLINATION.

Angular Value of one Scale Division = $0^{\circ} 721$.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.	Re. Div.
115° 4	117° 6	119° 8	117° 0	118° 8	118° 1	115° 6	113° 8	110° 0	107° 0	109° 0	112° 0	113° 0
117° 5	117° 2	112° 4	117° 0	119° 0	119° 2	114° 1	112° 5	110° 0	107° 7	109° 2	112° 0	113° 0
116° 2	117° 4	112° 0	117° 2	119° 6	120° 0	114° 7	112° 0	108° 6	106° 4	109° 0	112° 0	114° 0
116° 2	117° 2	112° 8	116° 8	120° 6	119° 2	114° 0	113° 1	108° 1	107° 0	109° 2	111° 3	114° 8
116° 4	117° 4	113° 8	116° 4	120° 0	118° 0	112° 5	114° 0	108° 3	107° 3	109° 4	112° 0	116° 2
116° 8	117° 6	115° 0	115° 6	119° 9	117° 0	111° 8	112° 0	108° 0	107° 0	109° 8	112° 0	117° 8
116° 6	113° 0	115° 6	115° 4	119° 8	118° 0	111° 5	109° 1	108° 2	107° 4	110° 0	111° 6	118° 8
117° 0	114° 0	115° 4	115° 6	118° 9	118° 8	111° 8	109° 0	108° 0	108° 0	109° 7	112° 0	119° 0
117° 4	113° 4	115° 4	116° 0	118° 4	118° 1	111° 3	108° 0	106° 0	108° 2	110° 8	111° 5	118° 8
117° 4	113° 2	116° 5	115° 0	117° 8	116° 3	112° 0	108° 0	108° 0	108° 2	111° 0	112° 0	118° 4
117° 0	112° 4	116° 4	117° 4	118° 2	115° 8	111° 1	107° 2	107° 0	108° 8	111° 1	112° 2	118° 4
117° 4	111° 2	116° 4	118° 6	118° 1	117° 8	112° 0	109° 2	107° 1	108° 6	112° 0	113° 0	117° 8

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ} 63$.

647° 4	645° 8	642° 6	650° 4	649° 5	642° 5	628° 0	620° 4	629° 8	631° 0	630° 6	635° 0	634° 5
647° 6	645° 7	643° 0	650° 2	650° 0	641° 0	626° 4	618° 0	628° 0	631° 0	630° 6	635° 2	632° 7
648° 0	645° 7	644° 4	648° 8	650° 0	640° 8	624° 0	615° 9	628° 0	628° 3	631° 0	639° 2	632° 5
648° 4	645° 8	646° 4	649° 2	650° 4	640° 2	628° 0	617° 2	626° 0	629° 7	631° 4	640° 0	631° 4
647° 2	645° 6	645° 8	649° 8	649° 2	637° 0	627° 2	622° 5	628° 2	629° 8	631° 6	639° 8	634° 5
647° 0	645° 4	645° 5	649° 2	648° 9	634° 1	625° 5	624° 1	627° 5	630° 8	633° 0	640° 2	638° 4
647° 4	645° 0	650° 4	650° 2	647° 6	634° 0	624° 0	626° 6	627° 6	630° 6	632° 6	638° 5	639° 0
645° 0	645° 6	650° 0	650° 0	647° 0	632° 2	622° 0	625° 0	630° 0	630° 7	633° 7	637° 2	642° 2
645° 4	644° 4	648° 0	651° 2	647° 6	632° 5	623° 0	626° 5	632° 0	631° 4	639° 0	637° 8	642° 3
645° 4	640° 5	650° 0	650° 8	646° 2	630° 0	624° 0	627° 8	632° 2	630° 8	632° 0	636° 2	642° 8
645° 6	641° 8	651° 2	652° 0	641° 8	628° 0	624° 0	632° 0	632° 5	630° 6	632° 5	635° 0	642° 5
645° 0	639° 2	650° 4	652° 4	641° 5	631° 1	623° 0	627° 8	633° 0	630° 4	635° 5	633° 2	644° 4

38° 0	37° 6	37° 6	37° 4	38° 0	37° 4	37° 0	36° 2	36° 4	35° 5	35° 7	36° 0	35° 9
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ} 64$.

207° 2	212° 8	210° 1	208° 9	210° 5	210° 1	210° 0	213° 7	215° 6	215° 0	214° 5	216° 4	217° 4
209° 7	212° 5	210° 1	208° 9	210° 4	210° 2	210° 2	213° 7	215° 6	215° 0	214° 5	216° 4	217° 4
210° 2	212° 5	210° 0	208° 7	210° 4	209° 0	210° 2	214° 3	215° 6	215° 0	214° 5	216° 8	217° 4
207° 6	208° 3	210° 1	212° 0	208° 8	209° 7	209° 0	210° 2	214° 3	215° 6	214° 3	214° 5	216° 8
206° 5	208° 3	210° 2	212° 3	210° 0	208° 9	210° 3	209° 0	211° 5	215° 0	215° 6	214° 3	214° 7
207° 4	208° 3	210° 5	212° 1	209° 8	209° 2	209° 5	204° 7	211° 7	215° 0	215° 6	214° 7	216° 8
207° 2	208° 3	210° 0	212° 2	209° 6	209° 6	209° 5	206° 2	211° 7	215° 4	215° 0	214° 7	216° 8
209° 5	208° 4	212° 3	212° 4	209° 6	209° 8	209° 5	206° 8	212° 4	215° 2	215° 0	214° 3	215° 6
209° 3	208° 6	212° 3	212° 3	209° 1	210° 0	209° 8	207° 9	212° 5	215° 2	215° 0	214° 7	215° 9
209° 3	208° 4	212° 4	212° 4	209° 1	210° 3	209° 7	208° 4	213° 3	215° 2	215° 0	214° 7	216° 6
209° 5	208° 7	212° 5	212° 7	209° 1	210° 5	210° 4	208° 8	213° 3	215° 6	215° 0	214° 7	216° 4
209° 6	207° 7	212° 8	209° 9	208° 9	210° 5	210° 1	209° 5	213° 3	215° 6	215° 0	214° 5	216° 4

39° 5	39° 3	39° 1	39° 1	39° 1	39° 1	38° 4	37° 4	37° 1	36° 9	36° 6	36° 9	36° 6
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
20 22 0	29° 820	14° 4	13° 0	W. by N.	Very light (nearly calm).	Clear; cir.
23 0	29° 822	14° 2	13° 2	W. by N.	Very light (nearly calm).	Clear; cir.
21 0 0	29° 824	14° 0	12° 8	W. by N.	Very light (nearly calm).	Cloudy; cir.-cum. and cir.-strat.
1 0 0	29° 822	13° 5	12° 4	W. by N.	Light.	Cloudy; cir.-cum. and cir.-strat.
2 0 0	29° 836	12° 9	11° 3	W. by N.	Moderate.	Cloudy; cir.-cum., cir.-strat., and haze.
3 0 0	29° 840	13° 3	11° 6	W. by N.	Fresh.	Cloudy; cir.-cum. and cir.-strat.
4 0 0	29° 820	13° 8	11° 6	W. by N.	Fresh.	Cloudy; cir.-cum., cir.-strat., and haze.
5 0 0	29° 816	13° 3	10° 9	N.W.	Brisk, with gusts.	Cloudy; cir.-cum. and cir.-strat.
6 0 0	29° 818	9° 8	8° 9	N.W. by N.	Moderate, with gusts.	Cloudy; cir.-cum. and cir.-strat.
7 0 0	29° 816	9° 8	8° 9	N.N.E.	Moderate.	Cloudy; cir.-cum., cir.-strat., and haze.
8 0 0	29° 828	8° 7	7° 8	E.	Moderate, with gusts.	Cloudy; cir.-cum. and cir.-strat.
9 0 0	29° 854	6° 5	5° 6	E.	Moderate.	Cloudy; cir.-cum. and cir.-strat.

February 26th and 27th. MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.			
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	110° 0	116° 0	117° 0	110° 8	112° 2	113° 5	114° 0	110° 2	110° 2	109° 8
5	0	110° 9	117° 0	116° 0	110° 8	112° 0	112° 2	114° 0	109° 8	110° 2	110° 2
10	0	110° 8	116° 0	114° 2	111° 2	112° 5	112° 2	114° 2	110° 4	111° 0	110° 8
15	0	111° 0	118° 0	112° 9	111° 8	116° 7	113° 0	114° 8	110° 8	111° 4	110° 8
20	0	111° 0	119° 2	112° 0	112° 7	118° 8	113° 5	114° 2	110° 8	111° 0	110° 0
25	0	110° 9	118° 0	111° 5	113° 0	118° 2	112° 7	114° 5	111° 0	110° 8	109° 2
30	0	110° 4	118° 8	111° 1	113° 8	115° 5	111° 9	114° 8	111° 6	110° 1	109° 0
35	0	110° 5	119° 0	111° 6	113° 7	116° 0	112° 8	114° 4	111° 5	110° 2	108° 6
40	0	110° 2	121° 0	111° 7	113° 0	119° 2	113° 0	113° 5	111° 8	110° 0	109° 0
45	0	111° 0	119° 2	111° 1	112° 2	124° 0	113° 0	114° 0	110° 7	109° 6	108° 4
50	0	112° 0	118° 2	111° 5	112° 2	121° 2	113° 8	113° 5	110° 8	110° 0	107° 2
55	0	114° 2	117° 2	111° 1	112° 5	117° 5	113° 7	112° 0	111° 0	110° 6	107° 1
One Scale Division = 0° 00087 parts of the H. F.											
		HORIZONTAL FORCE.									
M.	S.										
2	0	636° 0	621° 5	630° 0	626° 1	627° 0	616° 6	632° 8	631° 8	634° 5	631° 2
7	0	638° 0	619° 5	629° 0	626° 7	626° 4	615° 0	632° 2	634° 0	634° 0	633° 8
12	0	640° 0	617° 5	630° 0	624° 8	625° 2	613° 8	632° 8	635° 0	634° 2	634° 2
17	0	641° 0	618° 0	630° 5	623° 7	627° 8	630° 0	632° 0	634° 8	634° 8	634° 0
22	0	641° 0	620° 0	629° 0	624° 3	631° 0	638° 1	633° 5	635° 0	634° 8	633° 5
27	0	641° 0	616° 5	628° 0	622° 2	631° 1	635° 2	633° 5	634° 8	636° 8	634° 2
32	0	638° 0	614° 5	627° 5	622° 6	632° 2	633° 0	633° 9	634° 0	637° 0	634° 0
37	0	637° 5	617° 5	626° 0	622° 7	632° 2	631° 2	634° 8	633° 8	636° 4	633° 8
42	0	635° 0	620° 5	625° 5	623° 0	635° 0	631° 2	635° 0	634° 2	635° 8	633° 8
47	0	633° 0	626° 5	624° 0	624° 7	635° 2	631° 3	635° 0	634° 1	634° 2	633° 9
52	0	631° 0	628° 0	625° 5	625° 2	645° 4	633° 0	635° 5	635° 2	634° 1	633° 0
57	0	626° 0	631° 0	626° 2	625° 2	646° 7	633° 2	635° 0	635° 0	635° 8	632° 6
Thermometer		43° 9	43° 4	43° 5	43° 9	43° 6	43° 4	43° 3	43° 5	43° 5	43° 4
One Scale Division = 0° 00063 parts of the V. F.											
		VERTICAL FORCE.									
M.	S.										
3	0	204° 5	207° 9	205° 9	202° 3	202° 1	198° 7	198° 2	199° 9	200° 3	201° 6
8	0	205° 5	208° 1	205° 9	201° 6	202° 2	197° 9	198° 2	199° 9	200° 3	201° 6
13	0	205° 5	208° 1	205° 2	201° 4	202° 2	197° 9	198° 8	199° 9	200° 3	201° 5
18	0	207° 1	208° 0	205° 2	200° 6	201° 8	197° 2	198° 8	199° 9	200° 8	201° 5
23	0	206° 9	208° 0	205° 2	200° 5	201° 8	196° 6	198° 8	199° 9	201° 1	201° 5
28	0	206° 9	208° 0	204° 0	200° 2	201° 3	196° 4	199° 2	200° 1	201° 1	201° 5
33	0	206° 9	208° 5	204° 0	200° 9	200° 9	196° 3	199° 7	200° 1	201° 1	201° 1
38	0	206° 9	207° 2	203° 2	200° 9	200° 9	197° 1	199° 7	200° 1	201° 1	201° 1
43	0	206° 9	207° 2	203° 2	201° 1	200° 4	197° 4	199° 9	200° 1	201° 3	201° 1
48	0	206° 9	208° 1	202° 9	201° 1	200° 3	198° 0	199° 9	200° 2	201° 6	202° 2
53	0	206° 9	208° 1	202° 9	201° 6	201° 4	198° 2	199° 9	200° 2	201° 6	202° 2
58	0	206° 9	207° 3	202° 8	201° 4	200° 6	198° 0	199° 7	200° 3	201° 6	200° 9
Thermometer		42° 9	42° 7	43° 1	43° 0	44° 9	44° 6	44° 6	45° 0	44° 8	44° 0
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.		Barometer at 52° F.	Thermometers.		Wind.		Weather.				
			Dry.	Wet.	Direction.	Force.					
D.	M.	In.									
26	10 0	29° 837	25° 3	23° 3	E. by N.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.				
	11 0	29° 813	25° 1	22° 5	E. by N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.				
	12 0	29° 774	25° 5	23° 7	E. by N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.				
	13 0	29° 712	25° 9	23° 5	E.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.				
	14 0	29° 741	26° 3	24° 2	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	15 0	29° 700	27° 6	25° 7	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	16 0	29° 676	27° 9	26° 2	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	17 0	29° 600	27° 7	26° 7	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	18 0	29° 584	28° 0	27° 1	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	19 0	29° 558	27° 9	27° 3	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	20 0	29° 494	27° 6	27° 1	E.	Fresh.	Cloudy; cir.-cum. and haze.				
	21 0	29° 466	27° 5	27° 2	E.	Fresh.	Cloudy; cir.-cum. and haze.				

* At 27° 10', Thermometer of H. F., 45° '4; of V. F., 44° '6.

ATION.

19h.	20h.
Sc. Div.	Sc. Div.
109°8	107°0
110°2	107°9
110°8	108°5
110°8	109°2
110°0	110°0
109°2	110°8
109°0	110°4
108°6	110°6
109°0	111°0
108°4	112°1
107°2	112°3
107°1	112°0

VAL FORCE.

631°2	632°1
633°8	632°9
634°2	633°0
634°0	633°9
633°5	633°8
633°2	634°1
634°0	633°2
633°8	633°0
633°8	633°0
633°0	632°9
632°6	631°4

43°4

I. FORCE.

201°6	201°0
201°6	201°1
201°5	201°0
201°5	200°6
201°5	200°2
201°1	200°9
201°1	200°3
201°1	200°3
202°2	201°0
202°2	201°1
200°9	200°9

11°0

using Westerly Declination.

Weather.

and haze.
and haze.
and haze.
and haze.
and haze.
and haze.
haze, and snow.
haze, and snow.
haze, and snow.
haze, and snow.
haze, and snow.

MAGNETICAL OBSERVATIONS.

February 26th and 27th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
112°4	113°0	112°9	113°1	116°0	116°0	115°4	108°4	102°8	102°5	104°1	106°7	
112°0	112°2	112°5	113°4	116°0	115°7	113°0	107°8	102°2	101°4	104°1	107°0	
112°1	113°2	112°5	113°4	115°9	116°2	112°2	107°0	103°0	101°2	104°2	107°7	
111°6	113°4	112°5	113°0	113°4	115°2	114°6	111°2	107°0	103°2	101°2	105°1	
111°6	113°9	113°0	113°0	114°0	116°2	114°2	111°0	106°2	102°6	101°8	105°6	
111°5	114°0	113°0	113°0	115°0	117°0	114°7	110°8	105°1	103°0	102°1	105°7	
111°1	113°1	112°9	113°0	115°2	117°3	115°0	111°2	104°8	103°2	102°9	105°5	
110°8	113°0	113°0	112°8	116°0	117°0	115°0	110°2	104°2	102°4	102°5	105°7	
111°3	113°2	113°0	112°7	115°3	116°8	114°5	110°2	104°0	102°2	102°6	106°0	
111°4	113°2	113°0	112°9	115°3	116°2	114°2	110°3	103°4	101°8	103°2	106°4	
111°3	114°0	113°2	113°1	116°0	116°0	113°4	110°8	103°4	102°0	103°3	106°8	
112°0	114°2	113°2	113°8	115°6	116°0	114°2	109°2	103°4	101°8	103°8	106°2	

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

631°4	633°8	634°6	628°0	626°2	626°0	620°2	612°0	616°5	613°8	622°5	623°1	629°9
632°8	634°0	634°7	628°4	626°2	626°0	620°3	610°2	616°2	612°2	621°8	621°0	630°0
633°1	633°2	633°0	627°8	627°5	625°0	620°2	610°0	616°8	613°5	621°2	625°8	628°8
633°8	633°5	632°6	628°0	626°5	625°0	620°2	610°2	617°0	614°2	621°9	626°2	629°0
633°0	633°7	633°0	628°0	625°5	624°0	620°0	609°2	617°8	616°0	621°8	625°1	628°1
633°9	633°8	631°2	627°0	625°0	623°0	621°2	611°0	617°8	616°5	621°6	626°9	631°5
634°0	633°9	631°0	627°0	626°5	624°0	620°2	610°4	616°5	618°8	621°4	629°0	630°9
633°2	634°0	630°0	624°0	627°5	623°0	620°0	610°0	615°8	618°2	623°0	629°0	631°5
631°8	634°0	629°5	623°8	626°0	622°2	618°2	610°0	616°0	618°7	625°0	630°0	632°0
631°8	633°9	629°4	624°4	626°0	621°4	617°4	610°4	613°2	618°8	621°0	630°6	632°0
633°1	634°6	629°7	621°8	626°5	621°0	615°2	611°5	614°2	621°2	623°0	629°0	631°0
634°3	635°0	630°0	625°8	626°0	620°3	613°6	613°4	615°4	621°0	623°1	629°0	631°5

43°3	42°8	41°6	42°0	42°0	42°0	42°2	42°9	41°4	41°4	41°8	45°4	45°2
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

201°3	202°1	200°6	201°1	203°6	204°7	204°2	203°4	201°5	203°3	201°9	200°8	201°0
201°9	201°7	200°6	201°1	203°8	204°7	203°8	203°8	201°5	202°5	201°9	200°8	201°0
201°6	201°7	200°5	201°0	203°8	204°7	203°8	204°3	201°8	202°3	201°6	200°7	201°0
201°1	201°9	200°6	201°0	204°7	204°7	203°8	204°1	204°8	202°3	201°6	200°7	201°1
201°5	201°9	200°6	201°0	204°7	204°2	203°8	204°1	204°6	202°3	201°4	200°9	201°1
202°0	201°9	200°5	201°5	204°7	204°2	203°8	204°2	204°6	202°2	201°1	200°9	201°7
203°0	202°0	200°5	201°5	204°7	204°2	204°3	203°7	204°6	202°2	201°1	200°9	201°0
203°8	202°0	201°0	203°1	204°7	204°2	203°5	203°9	203°1	202°2	201°1	200°9	201°3
203°1	202°0	201°0	203°3	204°7	204°4	203°3	203°9	203°6	201°8	201°1	200°9	201°3
202°1	202°0	201°0	203°1	204°7	204°2	203°3	203°9	203°6	201°9	201°1	200°9	201°5
202°0	201°0	201°0	203°1	204°7	204°2	203°5	203°8	203°3	202°2	200°9	200°9	201°5
201°8	201°0	201°0	203°1	204°7	204°0	203°5	204°5	203°3	202°1	200°9	201°0	201°4

44°2	43°9	43°8	42°7	42°2	42°0	42°1	42°6	43°7	44°2	44°4	44°8	44°4*
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.
D.	H.	M.	In.	°.	Dry.	Wet.	Direction.	Force.	
26	22	0	29°448	27°5	27°2	27°2	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.
27	23	0	29°392	27°5	27°2	27°2	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.
27	0	0	29°355	26°3	26°0	26°0	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.
	1	0	29°301	26°5	26°2	26°2	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	2	0	29°229	27°9	27°6	27°6	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	3	0	29°217	27°0	26°9	26°9	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	4	0	29°167	27°7	27°7	27°7	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	5	0	29°073	28°9	28°7	28°7	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	6	0	28°954	29°3	29°2	29°2	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	7	0	28°925	29°9	29°3	29°3	E.	Fresh, with squalls.	Cloudy; cir.-cum., haze, and snow.
	8	0	28°866	30°7	30°4	30°4	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.
	9	0	28°838	30°8	30°4	30°4	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.

March 24th and 25th.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.								DECLINATION.	
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	20h.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	101° 2	103° 0	117° 0	108° 0	109° 3	109° 0	109° 2	107° 5	94° 4	101° 2
5	0	103° 8	102° 8	112° 2	107° 1	110° 0	109° 0	109° 4	108° 0	93° 8	107° 8
10	0	102° 7	103° 6	109° 2	105° 3	110° 6	109° 2	110° 0	107° 5	95° 3	112° 0
15	0	102° 0	106° 2	107° 8	106° 5	111° 0	108° 2	111° 0	105° 0	99° 0	114° 8
20	0	102° 0	111° 2	108° 8	105° 2	110° 9	108° 4	111° 1	104° 8	101° 2	117° 3
25	0	102° 0	120° 7	108° 4	106° 2	112° 1	110° 9	110° 6	106° 8	101° 0	119° 1
30	0	102° 2	125° 4	109° 2	107° 0	112° 3	111° 4	110° 2	107° 0	101° 2	120° 0
35	0	102° 2	124° 8	109° 2	107° 4	110° 9	111° 8	108° 9	105° 0	99° 1	118° 7
40	0	102° 8	123° 6	109° 0	107° 0	107° 9	110° 1	108° 3	102° 5	96° 5	116° 2
45	0	102° 6	122° 5	109° 0	107° 2	106° 9	109° 9	108° 3	101° 0	94° 5	114° 1
50	0	103° 1	120° 5	108° 8	107° 3	107° 9	109° 1	108° 0	100° 0	95° 8	115° 0
55	0	103° 1	119° 5	107° 5	107° 8	108° 9	109° 2	106° 7	97° 8	99° 2	113° 8
One Scale Division = 0° 00087 parts of the H. F.											
		HORIZONTAL FORCE.									
M.	S.	628° 7	630° 2	617° 5	622° 8	615° 8	617° 8	619° 1	621° 9	607° 0	607° 5
2	0	628° 7	630° 2	617° 5	622° 8	615° 8	617° 8	619° 1	621° 9	607° 0	607° 5
7	0	626° 0	622° 8	619° 6	622° 5	616° 0	618° 0	617° 8	622° 0	604° 0	605° 0
12	0	626° 0	612° 7	617° 5	620° 5	616° 3	618° 3	618° 2	622° 0	606° 0	608° 0
17	0	626° 5	601° 2	614° 2	617° 8	617° 3	618° 0	617° 0	622° 0	607° 2	610° 2
22	0	626° 2	601° 8	613° 0	617° 1	617° 0	617° 0	618° 0	622° 6	607° 7	616° 0
27	0	628° 5	6° 3° 3	612° 5	618° 6	615° 6	619° 1	618° 0	618° 6	607° 9	617° 5
32	0	628° 8	612° 2	614° 5	620° 0	618° 0	619° 0	622° 0	625° 2	615° 0	621° 5
37	0	629° 0	615° 8	617° 4	619° 1	621° 0	620° 8	621° 0	622° 5	614° 0	622° 0
42	0	631° 2	619° 0	621° 8	617° 6	619° 0	623° 0	621° 0	619° 0	610° 0	623° 0
47	0	630° 6	618° 5	619° 8	616° 0	618° 0	620° 5	620° 9	616° 0	605° 0	622° 0
52	0	631° 2	618° 0	621° 2	614° 7	616° 9	619° 0	620° 9	613° 2	603° 9	620° 0
57	0	631° 4	620° 0	622° 8	615° 6	618° 0	619° 8	620° 4	612° 0	604° 3	620° 0
Thermometer		51° 8	52° 6	52° 8	52° 2	51° 5	51° 0	50° 4	50° 1	50° 0	49° 8
One Scale Division = 0° 000063 parts of the V. F.											
		VERTICAL FORCE.									
M.	S.	195° 8	195° 7	194° 7	191° 1	191° 2	192° 0	191° 4	190° 7	175° 3	174° 0
3	0	195° 8	195° 7	194° 7	191° 1	191° 2	192° 0	191° 4	190° 7	175° 3	174° 0
8	0	195° 2	195° 7	194° 1	191° 1	191° 2	192° 0	191° 1	190° 7	175° 7	174° 0
13	0	195° 2	195° 5	193° 4	190° 9	191° 2	192° 0	191° 1	190° 7	172° 0	174° 2
18	0	195° 0	195° 5	193° 9	190° 1	190° 9	192° 0	191° 2	190° 7	172° 0	175° 6
23	0	195° 0	196° 4	192° 9	190° 1	190° 5	192° 0	191° 2	187° 0	167° 8	178° 2
28	0	194° 9	196° 7	192° 8	190° 3	190° 5	192° 0	191° 1	186° 0	167° 5	178° 5
33	0	194° 8	196° 7	192° 8	190° 4	190° 5	192° 0	191° 2	184° 3	167° 8	180° 1
38	0	194° 8	196° 2	192° 9	190° 5	191° 6	192° 0	190° 8	184° 0	167° 8	182° 0
43	0	195° 2	196° 2	191° 9	190° 5	191° 6	192° 0	191° 1	183° 2	167° 8	183° 6
48	0	195° 2	195° 5	191° 9	190° 5	191° 6	190° 7	191° 1	179° 7	170° 5	184° 9
53	0	195° 6	195° 2	191° 9	190° 5	191° 6	191° 5	191° 1	179° 6	170° 5	185° 4
58	0	195° 7	194° 7	191° 7	190° 5	191° 8	191° 5	190° 9	177° 1	172° 5	186° 3
Thermometer		51° 2	51° 8	51° 8	52° 4	52° 9	52° 0	51° 3	51° 2	51° 2	51° 4
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.			
24	10	0	29° 583	37° 9	32° 9		W.S.W.	Light.	Cloudy; cir-cum., cir-strat., and haze.		
	11	0	29° 576	36° 7	31° 4		S.W. by S.	Light.	Cloudy; cir-cum., cir-strat., and haze.		
	12	0	29° 561	35° 0	30° 8		S. by W.	Light.	Cloudy; cir-cum., cir-strat., and haze.		
	13	0	29° 561	33° 1	29° 5		S.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	14	0	29° 565	32° 8	29° 2		S.S.W.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	15	0	29° 551	32° 2	28° 8		S.S.W.	Very light.	Cloudy; cir-cum., cir-strat., and haze. Halo round the moon, diameter about 40°.		
	16	0	29° 520	32° 6	29° 3		S.S.W.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	17	0	29° 500	30° 7	27° 8		S.E. by S.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	18	0	29° 454	30° 7	27° 8		S.E.	Light.	Cloudy; cir-cum., cir-strat., and haze.		
	19	0	29° 412	31° 2	28° 4		E. by S.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	20	0	29° 357	32° 9	29° 7		E.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		
	21	0	29° 284	34° 1	30° 7		E.	Very light.	Cloudy; cir-cum., cir-strat., and haze.		

* At 25° 10', Thermometer of H. F., 52° 6'; of V. F., 54° 5'.

MAGNETICAL OBSERVATIONS.

March 24th and 25th.

DECLINATION.				Angular Value of one Scale Division = 0°721.								
21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
112°2	112°6	111°2	110°4	111°2	113°0	115°1	113°9	109°2	105°4	101°9	101°0	102°4
113°7	111°7	111°0	111°2	110°0	113°4	115°9	113°4	108°2	104°0	102°0	101°0	103°0
115°2	111°0	110°2	110°4	110°1	113°4	115°9	113°0	108°0	103°0	101°8	101°6	102°4
113°0	110°2	110°0	110°4	110°8	113°4	115°0	112°4	108°0	105°0	101°6	102°0	103°2
112°2	110°3	109°4	111°2	111°4	113°0	114°0	111°9	107°9	102°1	101°4	102°8	104°0
113°2	110°8	110°0	111°0	112°2	113°0	114°2	111°0	107°0	102°2	101°2	103°0	103°0
113°0	110°5	110°4	111°3	112°2	114°2	116°0	111°0	107°0	102°2	101°0	103°0	103°0
112°3	110°2	109°8	111°3	112°0	115°0	116°2	110°9	106°6	102°2	101°0	103°2	103°0
112°0	110°0	110°2	111°7	112°6	115°2	115°0	110°7	106°1	102°2	101°3	103°0	103°2
112°0	110°2	110°0	111°2	113°6	116°4	114°0	110°0	105°8	102°0	101°6	103°0	103°0
111°9	111°0	109°8	111°3	113°2	115°8	114°0	110°0	105°6	102°0	101°8	102°7	103°4
112°0	111°0	109°4	111°8	113°8	115°0	113°7	110°0	105°0	102°0	101°0	102°6	103°8

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1 '63.

622°0	621°6	624°2	621°3	616°0	616°5	612°6	606°0	596°0	603°2	607°5	610°0	615°2
622°9	623°2	624°8	622°8	612°4	618°6	612°1	606°0	596°0	604°0	607°2	609°2	614°8
626°4	623°0	625°6	622°2	616°0	618°2	613°0	604°6	596°0	604°0	608°0	609°6	614°8
623°9	623°9	624°8	621°0	616°2	619°0	613°8	601°0	589°0	604°0	608°5	610°0	615°0
622°0	624°0	623°2	621°0	616°8	620°4	612°1	602°2	598°0	604°0	608°0	613°8	614°2
622°0	624°2	623°6	620°4	617°0	617°8	609°8	600°7	599°8	605°0	608°0	614°2	610°0
623°0	624°3	624°2	619°8	616°6	619°0	607°4	600°0	600°0	605°0	606°2	616°6	610°0
621°9	625°0	623°8	619°0	619°2	616°2	606°5	600°0	600°0	606°6	606°8	616°0	609°6
622°0	624°2	623°7	618°2	617°8	615°0	608°0	601°1	601°9	606°0	608°0	615°7	610°0
622°0	623°6	623°6	618°8	616°5	616°4	608°0	600°8	602°5	607°0	610°0	615°8	609°8
622°0	623°8	624°8	618°6	616°8	615°0	606°2	600°0	604°8	607°5	608°2	615°4	609°7
621°0	623°7	622°0	616°3	617°8	614°9	605°8	599°0	605°0	607°0	609°8	614°6	612°7
49°3	49°4	50°0	50°0	48°7	50°5	51°4	52°0	52°4	52°4	52°1	52°2	52°6

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}64$.

189'4	188'9	188'5	189'2	191'7	190'8	188'0	186'7	185'6	187'1	188'0	188'8	190'4
189'4	188'9	188'9	190'0	191'4	190'7	188'0	186'8	185'6	187'1	188'0	188'8	190'6
189'4	188'9	188'9	190'0	192'5	190'5	188'0	187'1	185'6	187'1	188'0	188'8	190'6
189'1	188'9	188'8	191'1	192'5	190'2	188'0	186'5	186'3	187'1	188'0	190'0	190'4
188'9	188'9	188'5	191'1	192'5	190'2	187'9	186'0	186'3	187'1	188'0	190'0	190'3
188'9	188'9	188'9	191'1	192'5	190'2	187'9	186'0	186'3	187'1	188'5	190'0	189'8
188'9	188'9	188'5	191'4	192'2	189'5	187'3	186'0	186'5	187'1	188'5	190'6	190'1
188'9	188'9	188'6	191'3	192'2	189'5	186'7	186'0	186'5	187'1	188'5	190'6	189'8
188'9	188'7	188'5	191'6	192'2	189'5	186'7	186'0	186'7	187'1	188'8	190'5	189'8
188'9	188'0	189'0	191'7	191'7	189'0	186'7	186'0	186'9	187'7	188'8	190'5	189'7
188'9	187'8	188'7	191'7	191'7	189'0	186'7	186'0	186'9	187'8	188'8	190'3	189'7
188'9	188'6	189'2	191'7	191'7	189'6	186'7	186'0	186'9	187'8	188'8	190'4	190'5
50'3	51'0	51'4	50'6	49'8	51'0	52'0	52'2	52'1	52'0	52'2	52'4	52'5

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gütingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
D.	H.	M.	In.	Dry.	Wet.	Direction.	Force.	
24	22	0	29°27.2	34°1	30°6	E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.
	23	0	29°27.8	33°7	30°4	N.N.E.	Light.	Cloudy; cir.-cum., cir.-strat., and haze.
25	0	0	29°29.9	34°5	30°4	W.N.W.	Light.	Cloudy; cir.-cum., cum.-strat., and haze.
	1	0	29°33.1	33°5	30°1	W.N.W.	Light.	Cloudy; cir.-cum., cum.-strat., and haze.
	2	0	29°31.8	35°6	35°0	W.S.W.	Light.	Cloudy; cir.-cum., cum.-strat., and haze.
	3	0	29°32.9	44°2	38°4	W.	Brisk.	Cloudy; cir.-cum., cum.-strat., and haze.
	4	0	29°35.2	44°1	37°9	W.	Brisk.	Cloudy; cir.-cum., cum.-strat., and haze.
	5	0	29°37.3	42°5	38°0	W.	Brisk.	Cloudy; cir.-cum., cum.-strat., and haze.
	6	0	29°40.2	42°1	37°7	W. by N.	Brisk.	Cloudy; cir.-cum., cum.-strat., and haze.
	7	0	29°44.5	41°2	35°1	W.	Brisk, with gusts.	Cloudy; cir.-cum., cum.-strat., and haze.
	8	0	29°46.1	42°5	35°5	W.	Moderate.	Cloudy; cir.-cum., cum.-strat., and haze.
	9	0	29°48.1	42°4	35°5	W. by N.	Moderate.	Cloudy; cir.-cum., cum.-strat., and haze.

ON.

19°.	20°.
Sc. Div.	Sc. Div.
108°4	108°8
109°2	109°9
109°4	109°8
109°3	109°8
110°0	109°6
110°0	109°8
110°0	110°0
110°2	109°2
110°2	109°1
110°2	109°6
110°0	110°2
110°0	110°1

AL. FORCE.

600°5	597°1
600°6	597°9
600°0	598°1
600°0	598°5
600°0	597°0
599°5	598°0
599°0	598°9
598°8	598°2
598°5	598°0
599°0	597°8
597°5	599°0
599°2	600°0

61°9 | 61°5

FORCE.

167°0	171°0
167°0	171°2
167°0	171°2
168°7	170°8
168°7	170°8
169°5	170°8
169°8	170°8
169°8	170°8
170°5	170°8
170°5	170°8
170°5	170°8

62°6 | 61°7

Westerly Declination.

light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.
light thunder and rain.

MAGNETICAL OBSERVATIONS.

April 21st and 22nd.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
109°3	109°6	110°0	112°7	113°2	113°9	110°5	110°2	107°0	103°7	100°6	106°5	102°4
109°5	110°3	111°2	113°2	113°2	113°6	109°6	109°5	107°4	103°9	100°0	107°4	102°0
110°2	109°6	112°5	113°4	114°0	112°5	110°4	109°4	107°0	103°0	100°4	106°4	102°0
109°6	108°7	112°6	113°6	114°4	109°8	110°4	109°0	108°2	103°4	99°5	105°4	102°0
109°2	109°2	112°6	113°8	114°8	109°7	110°7	110°3	108°8	103°3	99°6	105°3	102°3
109°6	108°8	112°6	113°7	115°2	110°4	111°0	108°6	108°0	102°6	100°6	104°0	102°5
108°6	109°2	112°2	113°7	115°4	110°4	114°2	108°3	107°0	102°1	100°5	104°0	102°2
108°6	109°2	112°0	112°8	114°6	110°6	113°4	108°4	106°6	102°4	100°4	103°8	102°2
108°1	110°0	112°2	113°6	114°4	110°4	112°5	107°3	105°0	102°0	99°1	103°2	102°8
109°5	110°4	112°7	113°9	115°0	110°0	111°0	106°8	105°6	101°0	98°8	103°2	102°2
109°3	110°3	112°6	114°4	115°4	110°8	110°8	105°8	105°4	100°4	97°4	102°6	103°2
109°7	110°4	113°1	114°6	114°8	110°5	110°6	106°9	104°7	101°4	104°4	102°4	103°0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

599°0	599°0	601°2	600°7	598°0	581°0	585°6	582°8	575°5	586°2	587°0	602°0	604°0
599°5	600°5	601°8	601°0	598°4	583°8	584°6	579°0	575°2	586°9	588°5	610°0	603°8
600°0	599°0	602°2	599°3	597°8	584°2	585°0	581°2	576°0	586°0	589°0	604°0	603°0
600°0	597°2	602°0	598°0	596°0	585°0	586°1	578°0	574°6	588°0	590°0	601°5	603°4
600°0	598°0	602°2	598°0	596°0	585°3	585°9	576°2	574°0	585°0	592°2	601°0	602°0
600°9	598°2	602°3	598°6	594°7	585°4	585°1	579°0	577°0	586°5	593°5	600°0	601°6
600°0	598°2	601°8	600°0	594°0	585°0	584°7	576°1	576°0	586°8	590°3	606°0	601°6
600°0	598°3	601°6	599°2	593°2	583°2	585°4	580°0	575°4	586°5	590°2	604°7	601°0
600°5	598°4	601°4	598°2	592°3	583°2	584°0	578°5	576°0	587°0	581°0	603°0	602°0
601°0	598°6	602°8	598°4	590°1	583°2	581°8	577°0	577°7	588°0	584°4	603°0	600°7
600°2	601°4	602°6	598°0	588°2	581°8	581°8	576°0	581°5	591°0	583°0	604°2	598°0
601°5	601°3	602°0	598°2	587°8	581°7	579°0	578°0	582°2	591°0	590°2	603°0	598°3

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

170°0	170°4	170°3	170°6	170°6	171°0	172°8	173°3	175°3	179°2	178°6	186°9	179°6
170°0	170°1	170°7	170°6	170°5	171°0	172°8	173°3	175°2	179°2	179°1	186°0	179°6
170°3	170°4	171°2	170°2	169°8	171°2	172°8	173°5	175°2	179°0	179°1	184°2	179°6
170°6	170°4	171°3	169°7	170°3	171°8	172°6	173°5	175°2	178°6	179°1	183°3	179°7
170°6	170°6	171°3	169°8	170°3	171°8	172°9	173°5	175°2	179°2	180°0	183°3	179°5
170°6	171°0	171°5	169°7	170°8	171°8	172°9	173°9	175°2	179°2	180°0	182°5	179°5
170°6	171°0	171°1	170°4	171°1	171°8	172°6	173°9	175°2	179°2	180°0	182°1	179°5
170°6	170°4	171°2	170°3	171°1	171°8	172°6	171°6	175°2	179°2	180°0	181°5	179°5
170°3	169°9	171°3	169°8	171°8	171°9	173°4	175°3	178°1	179°2	179°7	180°9	179°4
170°1	170°1	171°1	169°8	172°0	172°9	173°2	175°5	178°1	179°2	179°8	180°6	178°7
170°5	170°4	171°1	169°8	171°6	173°0	173°0	175°5	178°6	179°5	181°6	180°5	178°5
171°2	170°1	170°6	169°8	171°9	172°8	172°6	175°5	178°6	179°5	181°5	179°6	178°5

and increase in Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Greenwich Time			Barometer at 32°		Thermometers.		Wind.		Weather.
D.	H.	M.	In.		Dry.	Wet.	Direction.	Force.	
21	22	0	29°534	54°4	—	—	E.S.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.
	23	0	29°542	52°2	—	—	S.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.
22	0	0	29°574	49°3	—	—	S.E.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	1	0	29°592	49°9	—	—	S.E.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	2	0	29°603	52°4	—	—	N.E. by N.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	3	0	29°632	51°2	—	—	N.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	4	0	29°641	51°0	—	—	N. by E.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	5	0	29°653	49°3	—	—	N.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	6	0	29°667	47°9	—	—	N.N.E.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	7	0	29°684	46°9	—	—	N.N.E.	Very light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	8	0	29°684	45°9	—	—	N.N.E.	Light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.
	9	0	29°682	45°5	—	—	N.E.	Light.	Cloudy; cir.-strat., cir., and cir.-cum.; rain.

May 28th and 29th.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.										DECLINATION.
	10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	106° 0	108° 0	111° 9	112° 2	113° 4	115° 4	111° 2	111° 4	111° 4	124° 0	81° 8
5 0	106° 1	108° 1	112° 7	112° 9	114° 4	119° 9	108° 6	111° 2	111° 0	123° 6	80° 2
10 0	106° 1	108° 6	114° 6	113° 1	115° 2	122° 6	108° 8	110° 8	111° 7	122° 2	81° 2
15 0	105° 5	108° 4	113° 4	116° 9	115° 0	127° 2	112° 2	110° 6	112° 2	123° 2	88° 4
20 0	105° 9	108° 4	112° 9	117° 8	115° 6	126° 9	115° 2	111° 4	112° 4	126° 2	100° 0
25 0	105° 9	108° 4	112° 7	115° 8	114° 9	126° 4	115° 7	112° 0	114° 2	129° 8	104° 4
30 0	105° 6	108° 4	110° 4	115° 6	114° 4	125° 0	115° 5	111° 2	114° 2	132° 4	108° 5
35 0	106° 1	108° 9	112° 1	115° 4	113° 5	114° 6	114° 2	111° 0	113° 0	134° 8	108° 8
40 0	106° 3	108° 4	114° 0	114° 5	113° 4	112° 3	113° 8	112° 3	115° 0	129° 9	114° 4
45 0	106° 9	109° 4	113° 0	113° 4	112° 0	112° 9	113° 4	112° 8	115° 0	109° 6	112° 2
50 0	107° 4	110° 2	110° 0	112° 9	111° 9	113° 3	112° 4	112° 4	115° 4	97° 6	108° 5
55 0	107° 5	110° 4	108° 4	112° 9	113° 0	112° 6	111° 6	112° 4	117° 2	82° 4	108° 4
One Scale Division = 0° 00087 parts of the H. F.											
HORIZONTAL FORCE.											
M. S.	60h° 0	60h° 2	61h° 2	61h° 5	60h° 0	60h° 0	60h° 2	61h° 0	61h° 0	60h° 0	61h° 5
2 0	608° 0	607° 2	613° 0	614° 4	604° 0	597° 0	598° 4	614° 6	612° 4	604° 2	537° 8
7 0	608° 0	607° 2	613° 0	608° 0	604° 0	597° 0	596° 0	625° 4	612° 6	604° 3	529° 0
12 0	608° 6	609° 0	613° 0	611° 0	604° 2	598° 0	593° 2	620° 0	606° 2	623° 0	555° 7
17 0	607° 5	610° 0	614° 0	613° 8	604° 2	600° 0	596° 2	622° 2	606° 6	626° 0	551° 6
22 0	606° 2	607° 5	614° 2	613° 7	603° 5	602° 5	601° 4	623° 2	609° 2	625° 2	562° 7
27 0	606° 0	608° 2	614° 0	613° 1	603° 0	603° 0	603° 2	623° 4	608° 4	620° 3	575° 5
32 0	606° 0	609° 0	614° 2	611° 8	604° 1	601° 0	603° 8	616° 2	603° 0	608° 8	587° 3
37 0	604° 8	607° 2	617° 0	611° 0	604° 0	598° 5	617° 0	616° 8	602° 2	597° 5	592° 8
42 0	606° 0	607° 0	620° 0	611° 0	603° 0	603° 0	604° 0	614° 2	602° 6	563° 4	592° 0
47 0	608° 0	608° 0	620° 0	607° 0	601° 0	602° 6	605° 2	614° 8	594° 6	557° 6	590° 8
52 0	608° 2	608° 2	616° 0	605° 0	598° 0	601° 0	605° 4	616° 6	590° 2	549° 2	588° 7
Thermometer	65° 6	66° 0	66° 4	66° 4	66° 2	66° 2	66° 0	65° 8	65° 6	65° 4	65° 4
One Scale Division = 0° 00063 parts of the V. F.											
VERTICAL FORCE.											
M. S.	168° 4	169° 5	170° 4	161° 6	162° 3	161° 8	150° 2	161° 1	159° 7	141° 2	98° 8
3 0	168° 4	169° 5	170° 4	161° 2	162° 6	161° 8	151° 4	161° 5	159° 7	134° 1	96° 4
8 0	168° 6	169° 5	170° 5	161° 2	162° 6	159° 6	154° 2	160° 9	159° 1	134° 1	98° 5
13 0	168° 6	169° 7	170° 5	163° 9	162° 6	157° 4	157° 7	159° 5	159° 3	133° 9	104° 5
18 0	168° 5	169° 7	170° 5	163° 9	162° 6	155° 2	158° 8	159° 6	156° 7	133° 9	112° 2
23 0	168° 5	169° 7	170° 6	163° 9	161° 8	153° 2	161° 7	159° 4	157° 0	131° 5	116° 2
28 0	168° 5	169° 7	170° 6	163° 5	161° 8	149° 0	161° 8	159° 4	157° 4	129° 7	115° 5
33 0	168° 6	169° 7	167° 4	161° 9	161° 8	149° 1	164° 2	158° 4	155° 0	124° 9	115° 3
38 0	168° 6	169° 7	167° 3	162° 0	161° 8	149° 1	160° 7	158° 8	152° 7	121° 5	121° 7
43 0	169° 3	169° 7	167° 1	162° 3	161° 8	150° 0	160° 4	159° 5	152° 9	108° 5	123° 5
48 0	169° 3	169° 7	167° 1	162° 3	161° 8	150° 0	161° 1	159° 8	152° 8	104° 2	128° 0
53 0	169° 3	169° 7	164° 9	162° 3	161° 8	150° 4	160° 2	159° 8	153° 1	102° 4	130° 0
Thermometer	63° 7	64° 3	64° 5	64° 5	66° 5	66° 5	66° 7	66° 7	66° 7	66° 7	66° 3
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.	Barometer at 32°.		Thermometers.		Wind.		Weather.				
	D.	H. M.	In.	Dry.	Wet.	Direction.					
28 10 0	29° 632		67° 8	60° 2		E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.			
11 0	29° 624		66° 9	61° 0		—	Calm.	Partially clouded, with cir., cir.-strat., and cir.-cum.			
12 0	29° 624		66° 9	61° 0		E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.			
13 0	29° 638		63° 1	57° 2		E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.			
14 0	29° 654		60° 3	56° 5		N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
15 0	29° 664		64° 1	57° 3		N.N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
16 0	29° 682		63° 7	57° 6		N.N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
17 0	29° 688		62° 7	56° 3		N. by W.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
18 0	29° 624		61° 1	56° 1		E. by N.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
19 0	29° 638		60° 9	56° 1		E. by N.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
20 0	29° 624		57° 2	54° 6		N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
21 0	29° 639		58° 5	54° 9		N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			
22 0	29° 621		57° 5	54° 9		N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.			

* At 29° 10h, Thermometer of H. F., 65° 9; of V. F., 65° 3.

MAGNETICAL OBSERVATIONS.

May 28th and 29th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
124° 0	115° 4	125° 5	124° 7	121° 9	122° 5	119° 4	105° 6	104° 2	102° 8	103° 0	101° 8	105° 4
123° 6	113° 4	124° 7	124° 4	121° 8	123° 0	119° 6	106° 5	103° 6	103° 0	101° 8	105° 4	105° 9
122° 2	111° 5	124° 0	125° 0	121° 7	121° 6	119° 2	105° 9	103° 4	102° 7	102° 6	105° 4	106° 5
123° 2	119° 4	123° 6	124° 4	121° 4	123° 1	118° 0	104° 4	102° 2	101° 6	102° 6	105° 5	106° 3
126° 2	124° 8	123° 4	125° 5	121° 0	122° 0	116° 6	102° 4	103° 2	101° 4	103° 2	104° 6	106° 4
129° 8	132° 4	127° 5	124° 4	121° 0	123° 6	113° 5	102° 6	103° 2	101° 2	101° 4	105° 5	106° 5
132° 4	133° 3	129° 4	125° 3	121° 9	123° 8	114° 2	103° 4	103° 4	101° 8	102° 4	106° 4	106° 5
134° 8	133° 2	130° 8	126° 8	122° 4	122° 4	117° 2	104° 4	103° 8	102° 2	102° 6	105° 9	106° 3
137° 5	132° 1	130° 3	122° 6	123° 6	121° 5	115° 6	104° 4	103° 7	101° 8	103° 6	106° 0	106° 4
138° 8	129° 7	127° 7	123° 8	122° 7	121° 2	114° 4	104° 9	103° 2	101° 2	104° 2	105° 6	106° 5
130° 4	127° 4	128° 3	124° 2	123° 4	119° 0	109° 6	104° 4	103° 2	102° 8	104° 0	106° 0	105° 6
121° 2	126° 6	128° 6	122° 3	123° 6	118° 6	107° 9	104° 4	103° 6	102° 6	105° 2	106° 4	106° 0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

583° 7	576° 5	589° 8	599° 8	593° 9	592° 0	570° 0	568° 5	596° 2	608° 4	605° 8	612° 4	597° 8
583° 5	577° 6	589° 0	600° 9	597° 0	591° 8	566° 5	570° 0	595° 3	608° 8	604° 2	604° 2	599° 2
585° 5	587° 1	599° 6	602° 1	598° 0	591° 9	562° 0	575° 0	594° 4	608° 2	604° 8	603° 2	601° 0
588° 1	593° 8	599° 6	604° 4	598° 2	590° 0	559° 0	577° 5	594° 6	605° 6	606° 0	600° 2	598° 7
584° 8	595° 1	596° 6	601° 0	598° 8	587° 0	557° 0	583° 0	596° 2	605° 8	603° 5	601° 0	599° 0
581° 0	596° 2	595° 1	602° 0	599° 0	585° 4	559° 0	584° 0	599° 4	608° 0	595° 8	598° 2	599° 1
577° 5	594° 7	594° 2	602° 0	598° 8	585° 0	557° 0	589° 0	602° 0	608° 8	598° 3	599° 0	600° 3
583° 7	596° 0	591° 0	606° 8	599° 0	581° 9	551° 1	590° 0	603° 8	609° 2	601° 0	599° 2	599° 6
560° 8	597° 2	591° 0	601° 1	597° 2	581° 0	556° 0	592° 5	606° 0	608° 0	603° 3	600° 0	600° 2
566° 5	600° 8	591° 1	600° 9	597° 0	578° 2	558° 5	594° 5	605° 3	607° 8	602° 6	601° 0	601° 0
575° 0	600° 1	594° 0	594° 4	594° 0	577° 8	559° 0	594° 5	607° 2	604° 8	604° 0	601° 0	601° 9
576° 4	603° 5	599° 9	592° 9	593° 4	575° 8	564° 5	596° 0	608° 8	605° 0	604° 2	600° 8	604° 2
65° 2	65° 0	64° 5	64° 5	64° 1	63° 6	64° 0	64° 5	65° 3	65° 3	65° 4	65° 5	65° 6 a

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

130° 0	132° 0	151° 8	162° 6	165° 7	164° 4	161° 0	163° 5	164° 4	161° 9	162° 3	163° 5	162° 1
129° 9	134° 2	153° 0	163° 3	166° 2	164° 4	161° 0	163° 5	164° 3	162° 0	162° 3	162° 6	163° 2
129° 2	139° 8	153° 2	161° 1	166° 3	164° 3	161° 0	163° 5	164° 1	161° 3	162° 7	162° 3	163° 8
121° 0	137° 2	154° 0	163° 7	166° 3	164° 2	160° 5	163° 5	164° 1	161° 4	162° 2	162° 9	162° 5
117° 8	137° 6	154° 0	163° 6	166° 3	163° 8	161° 0	163° 5	164° 3	161° 1	162° 3	162° 6	163° 6
116° 5	143° 3	154° 0	163° 2	166° 3	163° 8	161° 9	164° 3	164° 4	161° 5	161° 9	162° 7	163° 6
114° 7	145° 4	154° 6	163° 5	165° 9	163° 8	161° 1	164° 3	164° 2	161° 5	162° 3	162° 4	162° 9
109° 6	148° 7	15° 6	164° 7	165° 9	163° 8	160° 4	164° 9	163° 9	162° 3	162° 6	162° 4	162° 9
109° 6	151° 8	155° 7	164° 5	165° 9	163° 0	161° 8	164° 9	163° 4	162° 5	163° 0	163° 2	163° 6
115° 7	155° 1	156° 6	164° 8	165° 9	163° 0	161° 0	164° 9	163° 1	162° 3	163° 3	163° 0	163° 8
116° 2	154° 0	158° 8	164° 6	165° 3	163° 0	163° 5	164° 9	162° 8	162° 3	162° 7	162° 3	163° 4
121° 9	151° 0	161° 9	165° 5	165° 3	161° 9	163° 5	164° 9	162° 8	162° 2	162° 7	162° 3	163° 4
65° 7	65° 5	64° 9	64° 5	64° 2	63° 4	63° 8	64° 5	64° 7	64° 8	64° 7	64° 8	65° 1 a

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
28 23 0	29° 613	56° 6	54° 6	N.E. by E.	Light.	Cloudy, with cir., cir-strat., and cir-cum.
29 0 0	29° 591	57° 5	54° 1	E. by N.	Light.	Cloudy, with cir-cum., cir-strat., and haze; showery.
29 1 0	29° 584	55° 7	52° 3	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning.
29 2 0	29° 580	56° 8	53° 1	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze.
29 3 0	29° 548	62° 9	58° 4	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.
29 4 0	29° 524	60° 9	56° 4	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze.
29 5 0	29° 510	61° 5	56° 9	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze.
29 6 0	29° 521	59° 3	55° 3	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze.
29 7 0	29° 583	58° 3	55° 8	N.E. by E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning.
29 8 0	29° 497	62° 1	58° 3	N.E. by E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.
29 9 0	29° 462	64° 6	61° 0	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.

June 23rd and 24th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	105° 5	106° 9	109° 4	109° 3	109° 4	109° 0	108° 0	108° 6	108° 8	109° 4	110° 0	110° 0
5	0	105° 6	107° 6	109° 4	109° 4	109° 4	108° 4	108° 4	108° 6	108° 8	109° 6	109° 8	109° 8
10	0	104° 1	107° 6	109° 3	109° 5	109° 4	108° 4	108° 3	108° 6	108° 8	109° 9	109° 9	109° 4
15	0	105° 7	107° 8	109° 3	110° 0	109° 4	108° 6	108° 3	108° 6	108° 8	109° 6	108° 8	108° 8
20	0	105° 3	108° 5	109° 2	110° 2	109° 6	109° 0	108° 3	108° 6	108° 8	109° 6	108° 8	108° 8
25	0	105° 2	108° 3	109° 3	109° 6	109° 6	108° 4	108° 4	108° 6	108° 8	109° 6	108° 8	108° 8
30	0	106° 2	108° 7	109° 4	109° 6	109° 3	108° 2	108° 4	108° 6	108° 8	109° 5	109° 4	109° 4
35	0	105° 6	108° 5	109° 4	109° 4	109° 3	108° 4	108° 4	108° 6	109° 2	110° 0	109° 4	109° 4
40	0	106° 1	109° 2	109° 4	109° 6	109° 4	108° 2	108° 5	108° 6	109° 2	110° 0	109° 4	109° 4
45	0	106° 4	109° 2	109° 4	109° 6	109° 0	108° 2	108° 7	108° 6	109° 2	110° 0	109° 4	109° 4
50	0	106° 4	109° 3	109° 1	109° 4	109° 2	108° 0	108° 6	108° 6	109° 4	110° 0	110° 0	110° 0
55	0	107° 1	109° 2	109° 2	109° 5	109° 0	108° 0	108° 5	108° 6	109° 4	110° 2	110° 2	110° 2
		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.	604° 1	606° 1	604° 0	604° 0	603° 5	602° 0	602° 0	601° 5	601° 5	600° 0	601° 8	601° 8
2	0	604° 0	606° 0	604° 1	603° 9	603° 0	602° 3	601° 5	601° 5	601° 0	601° 0	602° 4	602° 4
12	0	604° 0	607° 4	604° 0	604° 0	603° 0	602° 0	602° 0	601° 5	601° 0	601° 0	602° 8	602° 8
17	0	605° 0	607° 0	604° 2	604° 0	603° 2	602° 0	601° 0	601° 5	601° 0	601° 0	602° 2	602° 2
22	0	604° 3	607° 1	603° 7	604° 0	603° 2	602° 2	601° 0	601° 5	601° 0	600° 2	602° 0	602° 0
27	0	606° 0	608° 0	604° 0	604° 1	602° 8	601° 7	601° 2	601° 5	600° 8	600° 8	602° 0	602° 0
32	0	605° 2	606° 3	604° 2	603° 9	602° 0	601° 5	601° 5	601° 5	600° 5	601° 0	602° 2	602° 2
37	0	606° 1	605° 4	604° 5	603° 0	602° 0	601° 6	601° 8	601° 5	600° 2	601° 0	602° 4	602° 4
42	0	606° 3	603° 7	604° 1	603° 9	602° 2	601° 7	601° 6	601° 5	600° 2	600° 8	602° 5	602° 5
47	0	606° 2	602° 9	604° 2	604° 0	602° 4	601° 5	601° 3	601° 5	600° 2	601° 0	602° 5	602° 5
52	0	606° 8	603° 1	604° 3	603° 9	602° 4	601° 5	601° 5	601° 5	600° 0	601° 0	602° 8	602° 8
57	0	606° 8	603° 9	605° 3	604° 0	602° 6	601° 3	601° 5	601° 5	600° 5	601° 2	603° 8	603° 8
Thermometer		69° 6	69° 8	70° 0	69° 9	69° 4	69° 3	69° 0	68° 6	68° 2	57° 6	67° 1	67° 1
		One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
M.	S.	155° 3	154° 3	153° 1	153° 1	153° 1	148° 6	148° 6	151° 0	152° 2	153° 2	154° 4	154° 4
3	0	155° 9	154° 3	153° 1	153° 1	151° 9	148° 4	147° 6	151° 0	152° 2	153° 2	154° 6	154° 6
13	0	155° 5	154° 3	153° 1	153° 2	151° 9	148° 5	147° 6	151° 0	152° 2	153° 2	154° 6	154° 6
18	0	155° 6	154° 3	153° 1	153° 1	151° 9	148° 5	147° 6	151° 0	152° 2	152° 9	154° 6	154° 6
23	0	155° 6	153° 8	153° 5	153° 1	152° 0	148° 3	148° 2	151° 4	152° 2	153° 3	154° 6	154° 6
28	0	154° 7	153° 8	153° 5	153° 1	152° 0	148° 3	148° 2	151° 4	152° 2	153° 3	154° 6	154° 6
33	0	154° 7	153° 8	153° 5	153° 1	151° 9	148° 3	148° 2	151° 4	152° 7	153° 3	154° 4	154° 4
38	0	154° 7	153° 7	153° 5	153° 1	151° 9	148° 3	149° 4	151° 4	152° 7	153° 3	154° 4	154° 4
43	0	154° 4	153° 6	153° 5	153° 1	151° 0	148° 3	149° 3	151° 4	152° 7	153° 3	154° 3	154° 3
48	0	154° 4	153° 1	153° 2	153° 1	150° 9	148° 3	150° 2	151° 9	152° 7	153° 5	154° 3	154° 3
53	0	154° 4	153° 1	153° 1	153° 1	151° 1	148° 1	150° 2	152° 2	152° 7	153° 5	154° 3	154° 3
58	0	154° 4	153° 1	153° 1	153° 1	151° 1	148° 1	151° 0	152° 2	153° 2	153° 5	154° 4	154° 4
Thermometer		68° 3	68° 5	68° 7	68° 6	68° 6	70° 0	70° 0	69° 4	68° 5	68° 0	67° 3	67° 3
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
23	10	0	29° 722	70° 7	64° 1	S.W. by S.	Very light.	Clear.					
	11	0	29° 723	67° 6	62° 1	S.W. by S.	Very light.	Clear.					
	12	0	29° 722	67° 5	62° 2	S.W.	Very light.	Clear.					
	13	0	29° 736	64° 4	60° 0	S.W.	Very light.	Clear.					
	14	0	29° 753	61° 1	58° 3	—	Calm.	Clear.					
	15	0	29° 753	59° 1	57° 1	—	Calm.	Clear.					
	16	0	29° 765	58° 3	56° 4	—	Calm.	Clear.					
	17	0	29° 777	58° 1	56° 3	—	Calm.	Clear.					
	18	0	29° 775	55° 8	53° 7	—	Calm.	Clear.					
	19	0	29° 776	55° 8	52° 9	—	Calm.	Clear.					
	20	0	29° 789	53° 2	51° 2	N.W. by N.	Very light.	Clear.					
	21	0	29° 793	52° 8	50° 4	—	Calm.	Clear.					

* At 24° 10', Thermometer of H. F., 71° 6'; of V. F., 70° 3'.

MAGNETICAL OBSERVATIONS.

June 23rd and 24th.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110°0	110°4	112°3	115°5	117°4	117°8	115°5	111°4	106°4	102°5	102°4	103°4	105°4
109°4	110°0	112°4	115°9	117°0	117°4	115°4	111°3	106°2	102°5	102°5	103°4	105°6
109°6	109°8	112°6	116°2	118°2	117°5	115°4	110°9	105°6	102°2	102°9	103°4	105°8
109°9	109°4	111°2	113°3	116°3	118°4	117°5	115°4	110°0	105°4	102°4	102°9	103°6
109°6	108°8	110°2	111°2	113°4	116°4	117°4	115°1	110°0	105°0	102°1	102°9	103°2
109°6	108°8	110°0	111°2	113°8	116°4	117°4	114°6	109°7	104°5	102°2	103°2	103°8
109°6	108°8	110°2	111°4	113°2	116°5	118°0	117°4	114°4	109°4	104°4	102°2	103°2
109°5	109°4	109°4	111°4	114°6	116°8	118°2	116°8	113°5	109°2	104°0	102°2	103°4
110°0	109°4	109°2	111°7	114°5	116°8	118°4	116°6	113°2	108°4	103°4	102°2	103°4
110°0	109°4	110°0	112°0	114°6	117°2	118°2	116°4	112°4	108°2	103°4	102°2	103°4
110°0	110°0	110°4	111°8	115°2	117°3	118°0	116°3	112°3	107°5	103°3	102°2	103°2
110°2	110°2	110°4	111°7	115°4	117°4	118°0	116°2	111°7	107°2	103°0	102°4	103°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

603°2	605°8	609°4	612°8	611°0	604°6	598°0	593°0	593°5	595°0	602°0	607°8	613°8
603°4	606°0	609°5	612°8	610°0	604°0	598°0	593°0	593°5	595°7	602°8	608°2	613°5
604°2	606°2	610°1	613°0	609°0	604°0	597°4	593°0	593°0	596°0	603°0	609°8	614°4
605°0	606°4	611°1	613°0	609°0	603°0	596°6	593°0	593°0	597°2	604°2	610°8	615°2
604°4	606°8	611°2	613°5	608°0	603°0	596°0	593°0	593°8	598°0	604°2	610°8	613°2
603°8	607°4	611°1	613°0	608°0	601°8	595°0	593°0	594°8	598°3	605°0	610°4	613°5
604°5	607°6	611°6	613°1	607°7	601°0	594°5	593°0	593°8	599°0	604°2	610°2	614°0
604°8	607°2	611°2	612°2	607°2	601°2	594°1	593°0	593°5	599°2	607°8	610°8	614°2
604°8	607°3	612°0	611°8	607°0	600°2	593°8	593°0	593°1	599°8	606°2	611°2	614°2
605°0	607°4	612°1	611°3	606°4	600°0	593°5	594°0	593°0	600°0	607°0	611°4	614°5
605°8	607°9	612°1	610°7	606°0	600°0	593°5	593°5	593°5	601°0	607°4	613°0	614°2
605°8	608°1	612°1	610°7	605°0	599°9	593°0	593°8	594°0	601°9	608°0	613°2	614°8
66°6	66°2	65°5	65°3	66°1	67°2	67°9	68°5	69°2	69°4	70°0	70°3	71°1

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature 1° 64.

153°1	155°5	157°1	158°9	158°3	156°3	155°6	154°9	152°3	151°8	150°3	149°6	150°5
154°8	155°5	157°1	158°9	158°3	156°3	155°6	154°6	151°9	151°8	150°0	149°6	150°5
154°8	155°5	157°1	158°9	157°5	156°2	155°6	154°6	151°6	151°8	150°0	149°9	149°9
154°8	155°5	157°6	158°9	157°4	156°2	155°7	154°6	151°3	151°8	150°0	149°9	150°6
154°8	155°5	157°6	158°9	157°4	156°2	155°1	153°9	151°3	151°3	150°0	149°9	150°1
154°9	155°9	157°6	158°9	157°4	156°2	155°1	153°9	151°3	151°3	149°1	149°4	150°1
154°6	156°6	157°6	158°9	157°4	156°2	154°9	153°1	151°3	150°8	150°0	151°1	150°1
154°6	156°6	158°4	158°9	157°4	155°9	154°9	153°1	151°3	150°8	149°8	150°2	150°1
155°1	156°6	158°4	158°7	157°4	155°9	154°9	153°1	151°3	150°8	149°6	150°2	150°1
155°1	157°1	158°9	158°4	157°2	155°6	154°9	152°3	151°5	150°3	149°6	150°7	150°1
67°0	66°7	66°1	65°5	65°7	66°3	66°6	67°5	68°2	68°5	68°7	69°3	70°0

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
23 22 0	29° 809	51° 4	49° 2	—	Calm.	Clear.
23 0 0	29° 824	51° 4	49° 4	—	Calm.	Clear.
24 0 0	29° 844	57° 4	54° 9	—	Calm.	Clear.
1 0	29° 862	64° 1	59° 9	—	Calm.	Clear.
2 0	29° 869	66° 7	62° 1	S.W.	Nearly calm.	Clear.
3 0	29° 862	69° 1	63° 8	S.W.	Very light.	Clear.
4 0	29° 849	71° 7	65° 7	S.W.	Very light.	Clear.
5 0	29° 844	72° 7	67° 8	S.W.	Very light.	Clear.
6 0	29° 831	72° 3	65° 2	S.W.	Very light.	Clear.
7 0	29° 827	72° 3	63° 1	S.W. by S.	Very light.	Clear.
8 0	29° 817	73° 4	64° 3	S.W. by S.	Very light.	Clear.
9 0	29° 804	73° 7	66° 6	S.W. by S.	Very light.	Clear.

MAGNETICAL OBSERVATIONS.													July 21st and 22nd.																
DECLINATION.													Angular Value of one Scale Division = 0' 721.																
19°.		20°.		21°.		22°.		23°.		0°.		1°.		2°.		3°.		4°.		5°.		6°.		7°.		8°.		9°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117°6	116°4	116°4	116°2	116°2	115°0	114°8	114°6	114°4	114°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2
117°4	116°2	116°2	115°0	114°8	114°6	114°4	114°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6
117°2	115°8	115°8	114°6	114°4	114°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0
117°0	115°6	115°6	114°4	114°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7
116°8	115°4	115°4	114°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4
116°6	115°2	115°2	114°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1
116°4	115°0	115°0	113°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8
116°2	114°8	114°8	113°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5
116°0	114°6	114°6	113°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2
115°8	114°4	114°4	113°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9
115°6	114°2	114°2	113°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6
115°4	114°0	114°0	112°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3
115°2	113°8	113°8	112°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0
115°0	113°6	113°6	112°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7
114°8	113°4	113°4	112°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4
114°6	113°2	113°2	112°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1
114°4	113°0	113°0	111°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8
114°2	112°8	112°8	111°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5
114°0	112°6	112°6	111°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2
113°8	112°4	112°4	111°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9
113°6	112°2	112°2	111°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9	103°6
113°4	112°0	112°0	110°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9	103°6	103°3
113°2	111°8	111°8	110°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9	103°6	103°3	103°0
113°0	111°6	111°6	110°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9	103°6	103°3	103°0	102°7
112°8	111°4	111°4	110°2	109°9	109°6	109°3	109°0	108°7	108°4	108°1	107°8	107°5	107°2	106°9	106°6	106°3	106°0	105°7	105°4	105°1	104°8	104°5	104°2	103°9	103°6	103°3	103°0	102°7	102°4
112°6	111°2	111°2	110°0	109°8	109°6	109°4	109°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8
112°4	111°0	111°0	109°8	109°6	109°4	109°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6
112°2	110°8	110°8	109°6	109°4	109°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4
112°0	110°6	110°6	109°4	109°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2
111°8	110°4	110°4	109°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0
111°6	110°2	110°2	109°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8
111°4	110°0	110°0	108°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8	103°6
111°2	109°8	109°8	108°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8	103°6	103°4
111°0	109°6	109°6	108°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8	103°6	103°4	103°2
110°8	109°4	109°4	108°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8	103°6	103°4	103°2	103°0
110°6	109°2	109°2	108°0	107°8	107°6	107°4	107°2	107°0	106°8	106°6	106°4	106°2	106°0	105°8	105°6	105°4	105°2	105°0	104°8	104°6	104°4	104°2	104°0	103°8	103°6	103°4	103°2		

August 27th and 28th.											
MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of One Scale Division = 0° 721.						DECLINATION.			
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	107° 5	108° 9	110° 4	107° 9	109° 5	117° 4	111° 6	109° 4	108° 4	110° 4
5	0	107° 9	109° 6	110° 4	108° 4	109° 4	116° 2	110° 5	109° 4	108° 4	110° 4
10	0	108° 4	110° 1	110° 4	109° 3	109° 4	115° 9	110° 3	110° 4	108° 8	110° 4
15	0	109° 5	110° 2	110° 4	109° 4	109° 8	115° 8	110° 4	109° 8	108° 8	110° 3
20	0	108° 9	110° 3	110° 3	109° 6	110° 4	117° 4	109° 2	108° 8	108° 6	109° 9
25	0	108° 9	110° 4	110° 3	109° 4	109° 8	118° 4	109° 2	109° 4	109° 6	109° 6
30	0	108° 9	110° 4	110° 4	109° 4	110° 2	118° 3	109° 6	109° 4	109° 2	110° 2
35	0	109° 0	110° 2	110° 0	109° 0	110° 4	116° 4	109° 6	109° 4	108° 8	110° 6
40	0	108° 9	110° 2	108° 9	109° 4	110° 6	113° 0	109° 6	109° 6	110° 0	111° 0
45	0	108° 9	110° 1	108° 5	109° 4	113° 7	111° 4	109° 6	109° 4	110° 4	111° 4
50	0	109° 2	110° 2	107° 9	109° 2	118° 4	111° 4	109° 5	109° 0	111° 4	112° 0
55	0	109° 0	110° 4	107° 9	109° 2	117° 8	111° 4	109° 6	108° 4	111° 4	111° 8
Thermometer		70° 5	70° 4	70° 7	71° 0	71° 0	70° 5	70° 2	70° 0	69° 4	69° 0
HORIZONTAL FORCE.											
M. S.		One Scale Division = 0° 00087 parts of the H. F.						HORIZONTAL FORCE.			
		615° 0	617° 0	599° 0	599° 0	603° 0	598° 5	587° 2	600° 0	601° 6	600° 0
2	0	615° 0	617° 0	599° 0	599° 0	603° 0	598° 5	587° 2	600° 0	601° 6	600° 0
7	0	612° 0	615° 0	598° 2	598° 5	601° 2	596° 0	583° 1	598° 8	601° 8	601° 5
12	0	611° 0	615° 0	597° 2	604° 0	602° 0	594° 0	589° 2	599° 6	602° 2	601° 0
17	0	610° 5	615° 0	598° 0	606° 0	600° 2	589° 5	590° 8	601° 8	602° 2	601° 7
22	0	609° 2	614° 5	601° 0	608° 0	598° 0	587° 0	591° 8	602° 8	600° 0	600° 0
27	0	609° 2	611° 0	600° 0	607° 0	596° 0	587° 5	592° 8	602° 4	602° 0	599° 0
32	0	610° 0	609° 8	602° 0	605° 0	595° 0	587° 0	595° 8	602° 8	600° 8	600° 0
37	0	609° 8	608° 5	601° 5	603° 0	593° 9	584° 0	595° 0	601° 2	599° 4	600° 0
42	0	611° 4	608° 4	600° 0	603° 8	593° 0	582° 0	596° 0	599° 8	600° 0	600° 2
47	0	611° 0	607° 0	600° 0	603° 0	593° 0	583° 0	597° 8	600° 2	599° 8	600° 0
52	0	613° 0	602° 0	600° 0	602° 9	598° 0	584° 0	598° 8	600° 2	600° 8	599° 0
57	0	614° 2	599° 0	599° 0	603° 0	599° 0	584° 5	599° 8	601° 2	600° 6	599° 1
Thermometer		70° 5	70° 4	70° 7	71° 0	71° 0	70° 5	70° 2	70° 0	69° 4	69° 0
VERTICAL FORCE.											
M. S.		One Scale Division = 0° 00063 parts of the V. F.						VERTICAL FORCE.			
		149° 9	149° 5	147° 8	143° 0	143° 8	145° 2	148° 0	146° 6	146° 7	147° 4
3	0	149° 9	149° 5	147° 8	143° 0	143° 8	145° 2	148° 0	146° 6	146° 7	147° 4
8	0	149° 9	149° 5	147° 8	143° 0	143° 8	144° 6	148° 0	146° 6	146° 7	147° 8
13	0	149° 8	149° 5	147° 7	143° 0	143° 8	144° 6	148° 0	146° 6	146° 7	147° 8
18	0	149° 8	149° 5	147° 7	143° 4	143° 8	144° 6	148° 0	146° 6	146° 7	147° 9
23	0	149° 8	149° 5	147° 7	143° 8	144° 4	144° 6	148° 0	146° 6	146° 7	147° 5
28	0	149° 8	148° 9	147° 7	143° 8	144° 4	144° 6	148° 0	145° 9	146° 7	147° 5
33	0	149° 6	148° 6	147° 7	143° 8	145° 0	144° 6	148° 0	145° 9	146° 7	147° 5
38	0	149° 6	148° 6	147° 7	143° 8	145° 6	145° 0	148° 0	145° 9	147° 4	147° 5
43	0	149° 3	148° 4	146° 9	143° 8	145° 8	146° 3	147° 3	145° 9	147° 4	147° 4
48	0	149° 3	147° 9	146° 5	143° 8	145° 8	147° 2	147° 3	145° 9	147° 4	146° 2
53	0	149° 3	147° 9	144° 1	143° 8	145° 8	147° 2	147° 3	146° 3	147° 4	146° 2
58	0	149° 3	147° 8	144° 1	143° 8	145° 8	148° 0	146° 7	146° 3	147° 4	146° 2
Thermometer		69° 4	69° 5	72° 2	72° 2	71° 4	70° 8	70° 7	70° 5	70° 0	69° 7
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Gottingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
27	10	0	29° 613	64° 6	58° 6	S.S.W.	Very light.	Nearly clear, with cir.-cum. and cir.-strat.			
	11	0	29° 610	65° 5	59° 5	S.S.W.	Very light.	Clear, with light cir.-cum. and cir.-strat.			
	12	0	29° 618	65° 5	59° 9	S.S.W.	Very light.	Nearly clear, with cir.-cum. and cir.-strat.			
	13	0	29° 612	59° 0	55° 1	—	Calm.	Nearly clear, with cir.-cum. and cir.-strat.			
	14	0	29° 626	58° 5	56° 3	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	15	0	29° 628	56° 5	54° 5	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	16	0	29° 629	54° 6	52° 9	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	17	0	29° 643	53° 1	51° 7	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	18	0	29° 652	53° 2	57° 0	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	19	0	29° 645	52° 4	50° 2	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	20	0	29° 644	49° 5	47° 8	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	21	0	29° 650	47° 3	45° 5	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			

*At 28° 10', Thermometer of H. F., 71° 0'; of V. F., 70° 2'.

MAGNETICAL OBSERVATIONS.

August 27th and 28th.

DECLINATION.

Angular Value of One Scale Division = 0° 721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
118° 4	115° 2	119° 8	118° 5	125° 0	121° 6	118° 8	111° 4	104° 6	95° 4	97° 4	98° 2	101° 4
119° 8	116° 4	119° 2	118° 5	125° 0	121° 6	118° 2	110° 2	103° 8	94° 2	97° 4	97° 6	102° 0
119° 9	116° 4	117° 8	118° 7	126° 0	124° 5	118° 2	107° 8	103° 0	95° 4	96° 9	97° 6	102° 8
118° 3	118° 0	117° 2	120° 4	126° 0	124° 4	117° 4	106° 6	102° 4	95° 4	97° 0	97° 8	103° 0
116° 4	118° 8	117° 0	120° 6	126° 6	124° 9	117° 4	105° 4	101° 6	95° 2	96° 8	97° 9	102° 8
115° 5	118° 4	116° 4	121° 2	127° 0	122° 9	116° 4	105° 4	100° 5	95° 2	96° 7	98° 0	104° 3
114° 7	118° 3	116° 0	123° 2	127° 0	122° 9	116° 4	106° 2	100° 0	95° 4	96° 9	98° 4	105° 0
112° 3	119° 5	114° 4	124° 4	126° 4	122° 5	116° 7	106° 4	99° 6	95° 4	96° 9	98° 8	105° 2
111° 3	119° 5	115° 1	124° 4	126° 6	121° 7	116° 4	105° 5	99° 4	95° 4	97° 0	99° 0	105° 5
111° 2	119° 2	115° 5	124° 4	126° 9	120° 6	114° 8	105° 6	99° 4	96° 4	97° 2	100° 0	105° 9
111° 6	118° 6	116° 4	124° 9	125° 4	119° 6	113° 6	105° 6	99° 0	97° 3	97° 8	100° 3	106° 4
113° 4	118° 7	116° 2	125° 4	125° 9	119° 2	112° 4	104° 7	97° 8	98° 4	97° 3	100° 9	106° 4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

590° 0	592° 0	599° 2	597° 0	595° 0	586° 0	580° 0	570° 0	571° 8	571° 2	582° 8	591° 5	598° 8
587° 0	595° 0	599° 0	596° 8	591° 2	585° 0	578° 2	572° 0	570° 2	569° 2	583° 2	593° 0	600° 0
587° 8	596° 5	600° 2	596° 8	593° 5	583° 0	580° 0	573° 0	571° 8	576° 2	584° 1	595° 0	600° 0
584° 2	598° 8	601° 0	598° 0	592° 0	580° 2	579° 0	574° 5	572° 0	575° 8	585° 9	593° 0	600° 0
583° 6	599° 0	601° 4	598° 2	593° 0	580° 0	580° 0	573° 5	571° 2	576° 0	585° 0	593° 8	601° 0
582° 0	598° 8	601° 2	597° 5	592° 5	578° 8	576° 0	571° 1	571° 2	579° 2	585° 0	596° 0	604° 0
585° 0	598° 7	601° 2	597° 0	593° 0	578° 0	573° 5	572° 0	569° 6	578° 2	591° 0	597° 0	605° 0
584° 0	599° 0	604° 0	597° 0	591° 0	578° 8	571° 0	570° 0	572° 8	577° 2	591° 0	596° 0	605° 2
585° 0	599° 2	602° 0	597° 5	590° 0	578° 5	571° 0	568° 0	572° 0	577° 0	593° 5	595° 5	606° 0
589° 0	599° 0	602° 0	597° 6	589° 6	578° 0	570° 0	568° 6	572° 8	580° 0	593° 9	594° 2	604° 0
587° 9	598° 4	601° 0	597° 6	589° 0	578° 5	571° 5	570° 0	571° 0	584° 2	593° 0	596° 0	604° 0
591° 1	598° 2	598° 5	595° 2	585° 0	581° 5	569° 6	570° 0	571° 8	581° 2	591° 4	598° 0	606° 0
68° 0	67° 5	66° 6	66° 3	66° 9	63° 5	68° 8	69° 5	69° 7	69° 8	69° 7	70° 0	70° 7

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

135° 0	134° 0	133° 5	140° 1	148° 8	148° 5	148° 2	145° 9	145° 7	148° 6	148° 2	149° 1	149° 0
135° 0	134° 0	133° 5	140° 2	148° 8	148° 5	148° 2	146° 4	145° 7	147° 7	148° 2	149° 7	149° 0
135° 0	134° 5	133° 5	140° 2	148° 8	148° 5	148° 2	146° 8	145° 7	147° 7	148° 2	149° 7	149° 0
135° 0	134° 2	133° 7	141° 1	148° 9	148° 5	148° 2	146° 8	145° 7	148° 1	148° 2	149° 7	149° 0
135° 8	134° 2	133° 7	141° 5	148° 9	148° 5	148° 2	146° 6	146° 6	148° 1	148° 2	149° 7	149° 0
135° 8	134° 2	133° 7	145° 1	148° 9	148° 5	147° 1	146° 6	146° 3	149° 3	148° 2	149° 7	148° 8
137° 2	134° 0	133° 7	146° 2	148° 9	148° 6	146° 6	146° 0	146° 3	148° 7	148° 3	149° 7	149° 0
136° 1	134° 0	136° 6	146° 4	148° 7	148° 6	146° 2	146° 0	146° 3	148° 7	149° 4	149° 7	149° 0
136° 1	134° 0	136° 6	146° 4	148° 7	148° 6	146° 2	145° 7	146° 3	148° 0	149° 4	149° 7	149° 0
136° 1	134° 0	136° 6	148° 3	148° 7	148° 6	146° 2	145° 7	146° 3	148° 0	149° 5	149° 0	149° 5
134° 2	133° 9	138° 3	148° 3	148° 5	148° 6	146° 2	145° 8	146° 9	149° 0	149° 5	148° 7	149° 5
134° 2	133° 9	139° 0	148° 8	148° 5	148° 9	145° 9	145° 7	146° 9	148° 2	149° 5	149° 0	149° 5
70° 1	69° 7	69° 7	67° 3	67° 2	67° 5	67° 0	69° 0	69° 0	69° 3	69° 0	69° 3	69° 5

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.	
					Dry.	Wet.	Direction.	Force.		
D.	H.	M.	In.	°	°	°				
27	22	0	29° 653	48° 0	46° 1	—	Calm.	Clear.		
27	23	0	29° 658	48° 8	46° 8	—	Calm.	Clear.		
28	0	0	29° 658	47° 5	45° 6	—	Calm.	Clear.		
1	0	0	29° 666	54° 0	51° 4	—	Calm.	Clear.		
2	0	0	29° 665	62° 0	57° 8	—	Calm.	Clear.		
3	0	0	29° 672	63° 8	60° 1	—	Calm.	Clear.		
4	0	0	29° 667	66° 1	61° 1	—	Calm.	Clear.		
5	0	0	29° 663	67° 8	60° 1	—	Calm.	Clear.		
6	0	0	29° 653	68° 1	60° 7	—	Calm.	Clear.		
7	0	0	29° 647	68° 3	59° 3	—	Calm.	Clear.		
8	0	0	29° 630	69° 0	60° 2	—	Calm.	Clear.		
9	0	0	29° 618	68° 1	59° 3	—	Calm.	Clear.		

September 22nd and 23rd.													
MAGNETICAL OBSERVATIONS.													
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	112° 4	113° 4	112° 8	112° 4	111° 4	110° 6	109° 4	110° 4	111° 6	120° 0	112° 0	
5	0	112° 6	113° 4	112° 5	112° 4	111° 5	110° 5	108° 8	110° 0	114° 3	119° 3	119° 0	
10	0	113° 2	113° 4	112° 6	112° 7	111° 6	110° 6	109° 0	110° 2	113° 8	117° 9	119° 3	
15	0	113° 4	113° 4	112° 4	112° 5	111° 4	110° 4	109° 5	111° 5	114° 4	117° 8	117° 9	
20	0	113° 4	113° 4	112° 4	112° 5	111° 5	110° 4	108° 9	111° 5	114° 6	117° 0	117° 5	
25	0	113° 6	113° 4	112° 8	113° 4	111° 4	110° 4	108° 8	112° 6	115° 4	114° 9	119° 6	
30	0	113° 6	113° 4	112° 8	112° 5	109° 6	109° 9	109° 4	113° 0	115° 2	114° 3	119° 6	
35	0	113° 8	112° 8	112° 8	112° 4	110° 0	109° 7	110° 4	113° 8	118° 4	113° 6	118° 4	
40	0	114° 2	112° 6	113° 0	112° 2	110° 0	109° 7	111° 0	115° 4	119° 4	112° 6	117° 9	
45	0	114° 2	112° 4	112° 4	111° 4	110° 4	110° 2	106° 2	116° 2	119° 6	111° 9	117° 3	
50	0	114° 6	112° 4	112° 6	111° 4	110° 5	110° 4	106° 0	116° 2	119° 5	111° 7	116° 8	
55	0	113° 4	112° 0	112° 4	111° 4	110° 6	110° 2	108° 4	116° 4	120° 0	113° 5	117° 4	
M. S.		One Scale Division = 0.00087 parts of the H. F.						HORIZONTAL FORCE.					
		607° 4	613° 8	615° 0	610° 2	608° 9	613° 6	616° 1	611° 0	611° 0	608° 0	611° 5	
2	0	606° 8	613° 8	615° 0	610° 0	610° 0	613° 6	615° 5	611° 2	611° 4	608° 0	609° 0	
7	0	607° 0	613° 0	614° 2	609° 0	610° 2	614° 0	616° 0	612° 0	611° 0	608° 0	606° 0	
12	0	609° 2	613° 8	614° 8	608° 9	610° 2	614° 1	616° 1	609° 8	610° 0	606° 5	605° 0	
17	0	611° 2	615° 0	613° 0	607° 6	611° 0	615° 7	616° 9	609° 0	610° 0	607° 2	603° 0	
22	0	611° 2	615° 5	612° 5	609° 0	610° 1	616° 4	616° 0	609° 0	611° 0	604° 0	605° 0	
27	0	612° 2	616° 5	613° 2	608° 2	609° 4	616° 7	615° 7	609° 8	611° 2	603° 0	605° 0	
32	0	612° 6	616° 0	613° 0	607° 8	610° 0	616° 0	616° 0	609° 6	611° 4	603° 0	604° 5	
37	0	612° 8	616° 2	613° 5	608° 2	610° 5	617° 0	616° 4	609° 4	610° 8	607° 1	604° 7	
42	0	612° 2	618° 0	612° 2	608° 4	611° 3	617° 0	615° 8	609° 4	610° 4	609° 5	606° 5	
47	0	612° 8	617° 8	612° 2	608° 7	612° 0	617° 0	614° 2	609° 4	610° 0	610° 2	606° 0	
52	0	615° 0	617° 0	610° 0	609° 0	613° 1	617° 8	613° 2	609° 4	610° 0	612° 5	607° 5	
Thermometer		64° 2	64° 8	64° 8	64° 8	64° 3	63° 5	63° 0	62° 8	62° 4	62° 2	61° 8	
M. S.		One Scale Division = 0.00063 parts of the V. F.						VERTICAL FORCE.					
		163° 1	162° 0	160° 2	156° 2	157° 8	158° 1	157° 7	157° 6	157° 8	154° 9	158° 8	
3	0	162° 5	161° 4	160° 2	156° 7	157° 8	158° 1	157° 9	157° 5	157° 8	154° 9	155° 9	
8	0	162° 5	161° 6	159° 2	156° 7	157° 7	158° 0	158° 3	157° 5	158° 1	154° 4	156° 1	
13	0	162° 5	161° 6	157° 9	156° 7	157° 7	157° 5	158° 3	157° 7	158° 0	154° 2	156° 1	
18	0	162° 5	161° 6	157° 8	156° 7	157° 7	157° 5	158° 3	157° 7	158° 0	154° 1	154° 4	
23	0	162° 5	161° 6	157° 8	156° 9	157° 7	157° 7	158° 4	157° 7	158° 0	154° 0	154° 3	
28	0	163° 3	161° 6	157° 8	156° 9	157° 7	157° 7	158° 7	157° 7	157° 8	154° 0	154° 2	
33	0	162° 5	160° 8	157° 4	157° 1	157° 7	157° 7	158° 7	157° 9	157° 8	153° 8	154° 5	
38	0	163° 0	161° 3	157° 4	157° 1	157° 7	157° 7	158° 7	157° 9	157° 4	159° 2	154° 6	
43	0	163° 0	161° 3	157° 2	157° 7	158° 5	157° 7	158° 5	157° 9	157° 2	159° 2	156° 2	
48	0	163° 0	161° 3	157° 2	157° 4	158° 4	157° 7	157° 9	157° 9	154° 9	159° 1	156° 2	
53	0	163° 0	161° 3	157° 2	157° 8	158° 2	157° 7	157° 6	157° 9	154° 9	158° 9	156° 3	
Thermometer		62° 6	63° 1	64° 0	64° 5	64° 5	63° 7	63° 4	62° 7	62° 5	62° 5	62° 7	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.				
					Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°	°								
22	10	0	29° 765	60° 1	54° 9	—	S.S.W.	Light.	Partially clouded; cir.-cum. and cir.-strat.				
11	0		29° 745	58° 7	54° 7	—	—	Calm.	Partially clouded; cir.-cum. and cir.-strat.				
12	0		29° 746	53° 8	51° 7	—	S. by E.	Very light.	Partially clouded; cir.-cum. and cir.-strat.				
13	0		29° 754	51° 9	50° 3	—	—	Calm.	Clear.				
14	0		29° 748	50° 1	48° 6	—	—	Calm.	Clear.				
15	0		29° 745	49° 2	47° 8	—	—	Calm.	Clear.				
16	0		29° 745	50° 6	49° 3	—	—	Calm.	Clear.				
17	0		29° 734	48° 9	47° 3	—	—	Calm.	Clear.				
18	0		29° 732	47° 3	46° 3	—	—	Calm.	Clear.				
19	0		29° 743	46° 1	44° 8	—	—	Calm.	Clear.				
20	0		29° 732	45° 9	44° 4	—	—	Calm.	Clear.				
21	0		29° 725	45° 5	44° 0	—	—	Calm.	Clear.				

MAGNETICAL OBSERVATIONS.

September 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117°0	114°0	116°4	110°4	114°4	104°8	96°9	97°6	96°9	94°4	98°9	103°6	109°3
116°6	114°4	115°4	111°4	115°4	101°0	97°4	95°8	96°8	94°6	100°4	104°3	109°8
113°6	115°4	114°4	111°6	115°6	96°4	95°4	96°4	95°4	95°8	101°5	105°9	109°5
115°4	114°5	114°0	113°0	115°2	94°0	94°4	98°4	93°4	95°8	102°6	105°6	110°4
117°8	114°4	112°4	113°6	115°4	92°2	93°6	99°2	92°8	96°0	102°3	106°4	109°9
117°0	114°3	112°5	114°5	114°8	93°4	93°2	99°3	91°4	95°6	100°6	106°6	110°7
114°9	114°5	112°5	114°3	114°4	97°4	96°2	99°4	90°0	95°9	99°0	106°5	110°5
114°3	115°4	111°4	114°0	114°2	97°8	96°5	98°3	90°5	96°6	100°0	107°5	111°1
113°6	115°7	110°4	115°4	112°9	98°0	97°4	95°6	93°2	96°6	100°4	107°5	110°7
113°9	116°5	109°4	118°3	110°4	98°0	97°6	96°4	93°0	97°3	101°5	108°0	112°0
113°9	117°0	109°4	114°3	109°2	99°2	95°3	95°4	90°3	97°6	102°4	108°0	112°3
113°9	117°2	108°8	111°4	106°8	98°6	95°4	96°0	92°8	98°3	103°2	108°4	112°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

608°8	613°5	616°5	611°0	608°0	603°4	602°2	605°0	602°5	611°0	619°0	605°0	612°5
610°0	614°0	615°0	612°0	609°0	603°8	602°0	607°4	602°0	611°2	620°2	607°2	613°4
612°0	616°0	615°0	612°5	609°8	600°2	604°4	607°2	602°0	611°0	627°0	613°5	610°0
613°0	616°0	615°0	611°0	611°5	601°8	605°5	605°1	601°9	611°0	627°0	614°0	617°0
613°5	618°0	615°5	608°9	611°5	598°2	609°2	606°1	601°4	612°0	628°0	612°0	625°0
612°5	618°0	615°2	608°5	610°0	598°2	607°0	606°4	602°4	612°0	620°0	613°2	617°0
613°0	617°5	614°1	607°1	610°5	598°0	604°8	603°6	604°0	612°5	605°8	614°0	621°0
612°5	618°0	614°0	607°5	612°2	600°0	604°0	602°0	604°4	615°0	605°1	609°8	620°0
613°5	618°0	614°0	605°0	610°4	596°0	604°7	604°0	607°2	615°2	602°5	608°8	620°0
613°0	620°0	613°0	604°0	608°5	600°0	608°0	603°6	607°9	616°0	602°2	614°5	614°0
613°0	621°0	613°0	605°0	606°2	597°8	609°0	603°0	605°4	616°0	603°0	615°0	614°0
612°0	619°0	611°0	606°0	604°0	602°2	608°3	601°2	605°0	615°8	603°5	616°0	608°2
61°5	61°0	61°0	60°5	60°5	61°3	62°2	63°0	63°8	64°0	64°5	65°3	66°5*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

158°2	158°9	157°8	155°3	158°9	160°3	155°6	156°1	156°4	157°6	160°6	161°7	157°0
158°2	158°9	157°8	155°3	158°9	160°3	155°6	156°1	156°4	157°6	161°9	161°2	157°0
158°2	158°9	157°8	156°1	158°9	159°7	156°0	156°1	156°4	157°6	162°7	161°2	156°2
158°2	158°9	157°8	156°1	160°5	159°7	156°1	156°1	156°4	157°6	162°6	160°7	157°5
158°2	158°9	157°8	156°8	161°2	157°6	155°8	156°1	157°2	159°6	163°3	159°6	157°5
158°2	158°9	157°8	157°3	161°2	155°8	155°7	156°1	157°2	159°6	163°3	159°6	156°7
158°5	158°9	157°8	157°8	161°2	155°8	156°1	156°1	157°2	159°6	161°7	159°4	156°7
158°5	158°9	157°4	158°3	160°3	154°8	156°1	156°1	157°2	159°9	162°0	157°9	156°1
158°6	158°9	157°4	158°3	160°3	154°2	156°1	158°0	157°2	159°9	161°7	157°9	156°1
158°6	158°9	155°8	158°4	160°3	155°6	156°1	156°9	156°9	160°3	161°7	157°9	156°1
158°8	158°9	155°8	158°9	160°4	154°7	156°1	156°9	156°5	160°5	161°7	157°9	155°3
158°8	158°9	155°6	158°9	160°4	155°6	156°1	156°9	156°5	160°5	161°7	157°9	154°8
62°4	62°0	62°3	62°5	61°3	61°7	62°5	62°6	63°0	63°4	63°7	64°5	65°5*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
22 22 0	29°721	45°5	44°2	—	Calm.	Clear.
23 0	29°719	45°7	44°4	—	Calm.	Clear.
23 0 0	29°720	49°9	48°8	—	Calm.	Cloudy, with cir. cum. and cir.-strat.
1 0	29°720	52°8	51°7	—	Calm.	Cloudy, with cir. cum. and cir.-strat.
2 0	29°723	54°7	56°3	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
3 0	29°729	61°5	58°3	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
4 0	29°720	62°9	59°0	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
5 0	29°709	65°0	60°9	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
6 0	29°695	65°5	60°8	S.W. by S.	Very light.	Cloudy, with cir. cum. and cir.-strat.
7 0	29°667	66°1	61°5	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
8 0	29°654	67°3	62°1	S. by W.	Very light.	Cloudy, with cir. cum. and cir.-strat.
9 0	29°636	67°1	61°1	S.S.W.	Very light.	Cloudy, with cir. cum. and cir.-strat.

October 20th and 21st.		MAGNETICAL OBSERVATIONS.										
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.					DECLINATION.					
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	109° 4	113° 5	112° 0	107° 7	110° 4	108° 4	108° 4	109° 7	112° 5	107° 3	111° 9
5	0	109° 6	113° 7	112° 0	108° 6	110° 8	108° 8	108° 2	110° 0	110° 4	107° 5	112° 4
10	0	110° 2	113° 7	112° 8	109° 5	112° 0	108° 6	107° 4	110° 2	108° 5	108° 6	113° 3
15	0	110° 5	113° 6	113° 9	110° 6	112° 5	108° 8	108° 2	109° 6	108° 4	109° 4	113° 0
20	0	111° 0	113° 6	113° 5	110° 6	111° 2	108° 6	109° 6	110° 2	109° 3	111° 2	113° 0
25	0	111° 4	113° 4	112° 2	109° 8	110° 0	105° 4	111° 3	109° 4	110° 2	111° 2	111° 8
30	0	112° 2	113° 2	113° 9	109° 8	109° 2	104° 6	111° 0	110° 1	110° 4	112° 1	111° 4
35	0	112° 4	112° 9	118° 4	109° 6	108° 4	104° 4	110° 4	111° 9	110° 4	113° 3	111° 2
40	0	112° 6	112° 5	116° 5	110° 4	108° 4	105° 2	110° 0	115° 9	110° 4	111° 0	111° 6
45	0	113° 1	112° 4	114° 4	111° 2	108° 4	108° 2	109° 3	118° 1	110° 5	112° 2	111° 8
50	0	113° 4	112° 4	111° 3	111° 4	108° 8	107° 6	109° 0	117° 4	109° 6	111° 7	111° 6
55	0	113° 4	112° 3	107° 9	110° 6	108° 4	107° 4	109° 3	115° 4	107° 4	111° 5	111° 4

M. S.		One Scale Division = 0°00087 parts of the H. F.										HORIZONTAL FORCE.	
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
2	0	619° 0	621° 6	618° 0	618° 0	617° 2	611° 8	611° 2	609° 5	611° 0	609° 0	615° 3	
7	0	619° 0	621° 0	614° 1	617° 8	616° 0	612° 0	611° 9	609° 0	610° 8	610° 3	615° 2	
12	0	620° 8	621° 2	613° 2	618° 2	616° 8	612° 8	611° 7	609° 5	609° 9	610° 2	615° 5	
17	0	622° 0	621° 5	614° 0	618° 8	617° 2	613° 8	608° 1	609° 6	609° 5	612° 0	615° 7	
22	0	622° 8	621° 1	614° 0	618° 8	616° 8	614° 0	607° 4	610° 1	609° 0	611° 8	615° 3	
27	0	623° 0	620° 5	615° 0	618° 0	616° 2	613° 2	609° 7	610° 0	609° 4	611° 6	615° 0	
32	0	623° 8	620° 1	615° 2	618° 2	615° 0	610° 8	611° 0	609° 6	609° 2	611° 9	617° 2	
37	0	624° 0	620° 0	620° 0	617° 6	615° 2	607° 8	611° 5	609° 0	609° 2	611° 0	617° 8	
42	0	624° 0	620° 0	624° 0	617° 0	615° 0	608° 0	611° 0	610° 0	608° 1	611° 2	616° 9	
47	0	624° 0	619° 0	625° 0	616° 8	614° 2	610° 2	610° 8	610° 0	607° 6	611° 0	617° 0	
52	0	624° 1	619° 0	624° 0	617° 2	613° 2	612° 0	609° 5	610° 9	606° 6	612° 9	616° 7	
57	0	623° 2	618° 0	619° 0	617° 4	612° 2	610° 0	609° 1	610° 8	608° 0	613° 2	616° 6	

Thermometer	59° 5	59° 5	59° 5	59° 5	59° 5	59° 2	58° 8	58° 2	57° 5	57° 3	57° 0
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M. S.		One Scale Division = 0°00063 parts of the V. F.										VERTICAL FORCE.	
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
3	0	168° 7	168° 8	166° 8	166° 5	166° 7	167° 5	169° 1	168° 5	164° 1	159° 0	164° 2	
8	0	168° 7	168° 8	166° 7	166° 5	166° 5	167° 5	169° 1	168° 5	163° 8	158° 2	164° 4	
13	0	168° 7	168° 8	166° 5	166° 5	166° 5	167° 5	168° 5	167° 5	163° 8	158° 2	164° 4	
18	0	169° 1	168° 8	166° 5	166° 6	166° 5	167° 5	168° 5	167° 5	163° 6	158° 1	165° 5	
23	0	168° 8	168° 8	166° 5	166° 9	166° 5	167° 5	168° 5	167° 5	163° 5	158° 1	165° 5	
28	0	168° 8	168° 8	166° 5	166° 9	166° 5	167° 5	168° 5	167° 0	163° 5	158° 1	165° 5	
33	0	168° 8	168° 8	166° 9	166° 9	166° 5	167° 5	168° 3	167° 0	163° 5	158° 1	165° 1	
38	0	168° 8	168° 3	167° 7	166° 9	167° 0	167° 7	168° 5	167° 0	162° 9	159° 1	165° 3	
43	0	168° 8	168° 3	167° 7	166° 9	167° 0	168° 3	168° 5	165° 1	162° 9	159° 5	165° 3	
48	0	168° 8	168° 3	167° 7	166° 9	167° 0	168° 1	168° 5	166° 1	162° 9	159° 5	165° 6	
53	0	168° 8	167° 5	167° 3	167° 1	167° 0	168° 1	168° 5	165° 2	162° 9	159° 5	165° 6	
58	0	168° 8	167° 5	166° 5	167° 0	167° 0	168° 4	168° 5	165° 3	161° 0	159° 6	165° 6	

Thermometer	58° 7	58° 8	59° 0	59° 5	59° 5	59° 4	59° 2	59° 0	59° 2	59° 2	58° 9
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.		Barometer at 32°.	Thermometers.		Wind.		Weather.				
			Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°	°						
20	10	0	29° 785	52° 8	42° 0	W. by S.	Light.	Clear.			
	11	0	29° 797	48° 5	38° 6	W. by S.	Very light.	Clear.			
	12	0	29° 821	45° 3	36° 6	W. by S.	Very light.	Clear.			
	13	0	29° 837	43° 4	35° 0	W. by S.	Very light.	Clear.			
	14	0	29° 860	43° 0	35° 6	N.W. by W.	Very light.	Clear.			
	15	0	29° 879	40° 6	35° 3	—	Calm.	Clear.			
	16	0	29° 887	39° 9	34° 2	N. by W.	Very light.	Clear.			
	17	0	29° 898	36° 6	32° 0	N.	Very light.	Clear.			
	18	0	29° 902	32° 9	29° 4	—	Calm.	Clear.			
	19	0	29° 909	31° 4	27° 5	—	Calm.	Clear.			
	20	0	29° 916	30° 6	26° 9	N.N.W.	Very light.	Light clouds.			
	21	0	29° 933	31° 2	27° 8	—	Calm.	Light clouds.			

* At 21° 10', Thermometer of H. F., 55° 5'; of V. F., 55° 5'.

MAGNETICAL OBSERVATIONS.

October 20th and 21st.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21 ^h	22 ^h	23 ^h	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
107° 3	111° 9	115° 0	114° 6	116° 4	118° 0	119° 4	117° 6	113° 4	108° 2	106° 2	107° 4	107° 9
107° 5	112° 4	114° 6	114° 6	116° 8	118° 4	118° 8	117° 2	113° 4	108° 2	106° 4	107° 6	107° 8
108° 6	113° 3	114° 2	115° 0	116° 8	119° 3	118° 8	116° 4	113° 6	107° 5	106° 5	107° 6	108° 2
109° 4	113° 0	114° 2	115° 0	116° 9	120° 4	118° 2	116° 4	112° 3	107° 4	106° 5	107° 6	108° 4
111° 2	111° 8	115° 4	114° 4	115° 0	116° 7	121° 5	117° 4	115° 2	110° 6	107° 1	106° 9	108° 8
111° 6	111° 8	115° 6	114° 6	115° 2	117° 2	120° 3	117° 4	115° 2	110° 3	107° 0	106° 9	109° 1
111° 4	111° 4	115° 5	114° 6	115° 0	117° 6	120° 2	118° 6	114° 2	110° 2	106° 5	107° 4	109° 1
113° 3	111° 2	114° 8	114° 6	115° 0	117° 6	120° 2	118° 6	114° 2	110° 0	106° 5	107° 4	109° 1
114° 0	111° 6	114° 4	114° 8	115° 4	118° 0	118° 4	118° 4	113° 6	109° 4	106° 3	107° 4	109° 2
112° 2	111° 8	114° 4	114° 6	115° 7	118° 4	118° 4	118° 6	113° 8	109° 3	106° 0	107° 6	109° 4
111° 7	111° 6	114° 6	114° 6	115° 8	118° 7	120° 3	117° 8	113° 8	109° 0	106° 0	107° 6	109° 0
111° 5	111° 4	114° 5	114° 6	116° 1	118° 0	120° 4	118° 4	113° 4	108° 4	106° 0	107° 4	109° 2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

609° 0	615° 3	620° 5	621° 0	617° 5	614° 8	611° 0	603° 8	594° 1	600° 0	604° 0	611° 0	619° 5
610° 3	615° 2	620° 5	621° 0	617° 7	615° 0	611° 0	603° 4	593° 7	601° 1	604° 0	611° 0	618° 2
610° 2	615° 5	620° 7	620° 8	618° 5	613° 2	611° 0	604° 2	594° 2	601° 8	604° 0	612° 0	619° 0
612° 0	615° 7	621° 0	620° 7	618° 5	613° 0	609° 8	602° 4	599° 0	601° 0	606° 0	613° 0	618° 8
611° 8	615° 3	621° 0	621° 2	617° 0	614° 0	608° 2	602° 0	598° 4	603° 3	607° 1	613° 5	619° 5
611° 6	615° 0	621° 0	621° 5	617° 0	614° 0	607° 4	601° 2	598° 1	602° 1	608° 0	614° 0	619° 0
611° 9	617° 2	621° 0	621° 7	617° 0	613° 2	605° 4	600° 0	597° 7	602° 2	609° 1	615° 0	620° 0
611° 0	617° 8	621° 5	619° 5	617° 0	615° 0	605° 0	599° 8	597° 1	603° 1	609° 2	616° 0	621° 0
611° 2	616° 9	620° 5	619° 2	616° 0	613° 0	601° 8	597° 2	597° 1	604° 3	610° 5	617° 5	619° 8
611° 0	617° 0	620° 5	619° 0	616° 0	610° 0	603° 8	597° 0	597° 0	606° 0	610° 0	617° 5	620° 0
612° 9	616° 7	620° 3	619° 5	616° 0	609° 2	603° 0	597° 0	598° 1	603° 0	610° 0	617° 5	621° 0
613° 2	616° 6	620° 5	619° 0	615° 8	611° 2	605° 0	595° 8	599° 1	604° 0	611° 0	618° 8	620° 5

56° 5	56° 4	55° 7	55° 4	54° 3	54° 0	54° 4	54° 6	55° 1	55° 1	55° 5	55° 5	55° 9
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

166° 1	167° 8	168° 9	169° 9	170° 8	174° 1	174° 4	173° 2	171° 2	170° 8	172° 4	172° 5	172° 6
166° 1	167° 9	168° 9	169° 9	170° 8	174° 1	174° 4	173° 2	171° 2	170° 8	172° 2	172° 5	172° 3
166° 1	167° 9	168° 9	169° 9	171° 5	174° 1	174° 4	173° 0	171° 0	170° 8	172° 2	172° 5	172° 3
166° 1	167° 9	169° 0	169° 9	171° 8	174° 1	174° 4	173° 0	171° 9	170° 8	172° 2	172° 5	172° 3
166° 1	168° 0	169° 0	170° 3	171° 8	174° 1	174° 4	172° 8	171° 9	170° 8	172° 3	172° 5	172° 2
166° 3	168° 5	169° 0	170° 5	172° 3	174° 1	174° 4	172° 8	171° 9	170° 8	172° 4	172° 5	172° 2
166° 3	168° 5	170° 2	170° 7	172° 7	174° 9	173° 8	172° 8	171° 7	170° 8	172° 4	172° 5	172° 3
166° 3	168° 5	169° 8	170° 8	172° 7	174° 9	173° 8	172° 1	171° 7	171° 5	172° 6	172° 7	172° 3
166° 3	168° 6	169° 9	170° 8	172° 7	174° 9	173° 8	171° 6	171° 2	171° 5	172° 6	172° 7	172° 3
166° 4	168° 9	169° 9	170° 8	173° 7	174° 9	173° 8	171° 6	171° 2	171° 5	172° 6	172° 8	172° 2
166° 8	168° 9	169° 9	170° 8	173° 7	174° 4	173° 8	171° 1	170° 9	172° 2	172° 5	172° 8	173° 1
168° 1	168° 9	169° 9	170° 8	173° 7	174° 4	173° 8	171° 2	170° 9	172° 3	172° 5	172° 5	172° 5

58° 4	57° 4	57° 2	57° 2	56° 5	55° 2	55° 2	55° 4	55° 5	55° 4	55° 2	55° 5	56° 0
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.
D.	H.	M.	In.		Dry.	Wet.	Direction.	Force.	
20	22	0	29° 943		31° 0	27° 6	—	Calm.	Light clouds.
	23	0	29° 959		33° 9	30° 5	—	Calm.	Cloudy.
21	0	0	29° 956		34° 5	30° 9	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	1	0	29° 962		35° 9	31° 7	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	2	0	29° 984		38° 1	34° 2	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	3	0	29° 961		41° 5	37° 0	—	Calm.	Cloudy, with cir., cir.-strat., and haze.
	4	0	29° 939		44° 0	38° 2	E. by S.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	5	0	29° 950		44° 9	40° 0	E.S.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	6	0	29° 938		44° 7	39° 7	N.E. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	7	0	29° 898		44° 1	38° 9	E.N.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	8	0	29° 882		44° 0	38° 8	E.N.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
	9	0	29° 863		43° 9	38° 9	N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and haze.

November 26th and 27th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0°721.								DECLINATION.			
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	106°9	103°8	116°0	116°6	111°6	106°0	115°2	111°6	111°4	110°4	109°2	
5	0	106°1	104°4	101°9	117°4	111°9	109°4	110°9	111°9	111°2	110°2	109°8	
10	0	106°6	104°9	98°3	116°4	112°6	113°0	109°2	111°4	110°4	110°2	109°8	
15	0	106°2	105°0	106°2	114°0	113°6	111°2	110°5	110°4	110°6	109°6	109°0	
20	0	106°6	105°4	109°4	114°6	115°0	110°0	112°5	109°4	111°0	109°4	108°5	
25	0	105°7	106°0	110°4	115°0	117°4	112°4	113°1	109°4	111°3	108°9	108°4	
30	0	105°0	110°4	110°5	116°0	117°6	116°4	113°4	109°4	110°8	109°2	106°6	
35	0	104°5	111°9	118°4	114°0	119°8	116°6	113°4	109°9	110°4	108°9	105°6	
40	0	104°9	110°0	110°4	112°4	114°4	116°0	113°5	110°4	110°2	109°3	105°6	
45	0	104°7	112°4	107°5	110°4	119°7	115°9	113°9	110°6	110°2	109°5	104°8	
50	0	104°4	136°2	111°3	110°8	119°3	116°0	113°4	110°9	110°4	109°6	104°3	
55	0	104°1	130°0	113°5	110°4	111°6	117°9	112°8	111°5	110°3	108°8	101°4	
One Scale Division = '000087 parts of the H. F.													
M.	S.	623°9	610°0	624°3	607°0	614°1	629°0	629°0	622°0	620°0	621°5	621°5	
2	0	623°9	610°0	624°3	607°0	614°1	629°0	629°0	622°0	620°0	621°5	621°5	
7	0	621°6	608°7	618°7	611°8	614°0	621°5	626°0	622°5	620°2	621°5	621°0	
12	0	619°2	609°1	604°9	614°0	615°0	620°8	622°0	622°0	621°0	621°5	621°5	
17	0	616°2	607°9	602°8	613°0	615°2	629°0	619°5	622°5	621°0	622°5	620°0	
22	0	613°8	607°7	608°0	609°0	615°8	628°2	620°5	623°0	621°0	622°0	619°0	
27	0	612°2	610°0	615°0	611°2	615°0	622°0	620°0	624°5	620°6	622°0	619°0	
32	0	612°0	605°0	613°0	612°4	615°4	626°2	622°0	622°5	620°8	622°2	616°5	
37	0	612°9	619°8	619°0	614°8	622°5	630°0	622°0	619°0	621°0	621°5	617°0	
42	0	612°2	621°2	612°1	611°0	625°0	627°2	622°0	618°0	621°0	621°2	618°8	
47	0	610°0	611°0	604°1	614°2	625°0	628°0	622°0	618°2	621°2	620°0	618°0	
52	0	610°3	617°0	604°0	615°0	635°5	626°5	622°2	619°0	621°2	620°2	620°0	
57	0	610°0	623°6	603°3	615°0	637°0	627°0	623°0	619°0	621°4	621°5	619°0	
Thermometer		46°9	46°9	47°0	46°6	46°8	46°8	46°7	46°5	46°2	46°0	45°0	
One Scale Division = '000063 parts of the V. F.													
M.	S.	193°4	192°7	187°2	196°8	197°6	184°3	186°7	188°1	188°8	188°6	185°8	
3	0	193°4	192°7	187°2	196°8	197°6	184°3	186°7	188°1	188°8	188°6	185°8	
8	0	191°4	192°5	189°0	197°6	197°6	184°3	186°7	188°5	188°8	188°5	185°8	
13	0	193°8	192°7	193°1	197°9	197°6	184°3	187°3	189°0	188°7	188°5	185°8	
18	0	192°5	192°5	194°8	197°9	197°6	184°5	187°9	189°0	188°7	188°3	181°6	
23	0	192°3	192°7	194°8	197°7	196°8	184°5	188°3	189°0	188°7	188°3	184°6	
28	0	193°2	192°7	197°2	197°7	195°9	185°7	188°3	189°0	188°7	188°3	184°6	
33	0	193°2	193°1	197°8	197°7	195°9	186°1	188°6	189°0	188°6	188°3	184°6	
38	0	193°2	191°9	193°3	197°5	195°9	187°2	188°7	188°8	188°6	188°3	185°0	
43	0	193°5	190°7	191°7	197°5	192°6	187°2	188°7	188°8	188°6	188°0	185°0	
48	0	193°5	192°6	192°5	197°5	192°8	187°2	188°6	188°8	188°6	187°1	185°0	
53	0	194°0	191°4	193°9	197°5	185°7	187°2	188°6	188°8	188°6	186°7	185°0	
58	0	193°1	187°2	195°5	197°5	185°7	187°2	188°7	188°8	188°6	186°5	185°8	
Thermometer		47°4	47°8	48°4	47°8	47°9	47°4	47°8	48°2	47°7	47°4	46°7	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.				
			Dry.	Wet.	Direction.	Force.	Direction.	Force.					
D.	H.	M.	In.	°	°								
26	10	0	29°817	25°9	23°8		N.W. by W.	Light.	Cloudy; cir.-cum. and cir.-strat.				
	11	0	29°823	24°4	22°6		N.W.	Very light.	Fine; cir.-cum. and cir.-strat.				
	12	0	29°837	23°7	22°3		N.N.W.	Very light.	Fine; cir.-cum. and cir.-strat.				
	13	0	29°844	22°6	21°7		—	Calm.	Fine; cir.-cum. and cir.-strat.				
	14	0	29°845	22°5	21°9		—	Calm.	Fine; cir.-cum. and cir.-strat.; aurora.				
	15	0	29°845	21°7	20°9		—	Calm.	Fine; cir.-cum. and cir.-strat.				
	16	0	29°847	21°3	20°7		—	Calm.	Fine; cir.-cum. and cir.-strat.				
	17	0	29°835	20°4	20°0		—	Calm.	Fine; cir.-cum. and cir.-strat.				
	18	0	29°816	19°6	19°3		—	Calm.	Light clouds; cir.-cum. and cir.-strat.				
	19	0	29°808	20°5	20°0		—	Calm.	Clouds; cir.-cum. and cir.-strat.				
	20	0	29°788	21°5	20°9		W. by S.	Very light.	Cloudy; cir.-cum. and cir.-strat.				
	21	0	29°774	22°1	21°2		W. by S.	Very light.	Cloudy; cir.-cum. and cir.-strat.				

* At 27° 10', Thermometer of H. F., 47° 10'; of V. F., 47° 12'.

MAGNETICAL OBSERVATIONS.													November 26th and 27th.	
DECLINATION.				Angular Value of one Scale Division = 0° 721.										
19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110° 4	109° 2	101° 3	101° 4	111° 1	113° 2	113° 4	114° 8	108° 5	113° 0	113° 1	109° 6	105° 2	107° 4	107° 4
110° 2	109° 8	104° 4	103° 8	111° 0	112° 6	113° 8	112° 7	109° 7	114° 4	112° 4	108° 6	105° 0	105° 8	107° 2
110° 2	109° 8	103° 9	103° 6	111° 0	112° 4	114° 0	111° 4	109° 7	115° 9	111° 6	109° 3	105° 2	106° 8	106° 4
109° 6	109° 0	101° 0	104° 2	110° 4	112° 2	113° 0	111° 3	109° 4	116° 4	112° 5	108° 9	103° 6	107° 6	106° 6
109° 4	108° 5	101° 3	105° 4	109° 4	111° 2	113° 5	111° 3	109° 4	116° 4	111° 3	107° 8	104° 6	108° 4	106° 2
108° 9	108° 4	105° 4	106° 8	108° 2	111° 0	114° 3	112° 1	109° 6	116° 4	110° 6	106° 6	105° 4	110° 4	105° 8
109° 2	106° 6	106° 2	108° 6	108° 6	113° 4	114° 5	111° 4	111° 5	116° 4	111° 4	106° 6	105° 3	110° 2	106° 4
108° 9	105° 6	107° 3	108° 6	109° 4	112° 4	111° 2	110° 4	111° 0	115° 4	109° 2	106° 2	104° 7	111° 0	106° 5
109° 3	105° 6	108° 2	110° 2	110° 4	112° 8	111° 3	109° 8	111° 4	114° 4	110° 4	104° 4	104° 4	110° 4	105° 4
109° 5	104° 8	108° 5	111° 1	110° 4	113° 5	115° 4	110° 2	109° 5	114° 5	108° 6	105° 4	101° 4	110° 2	105° 0
109° 6	104° 3	108° 4	111° 8	112° 5	113° 8	114° 6	109° 6	109° 8	114° 3	109° 4	105° 4	105° 4	108° 4	105° 8
108° 8	104° 4	106° 4	111° 4	113° 4	114° 0	115° 2	109° 4	110° 9	112° 6	108° 8	105° 4	105° 4	106° 8	106° 2

HORIZONTAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.	
619° 9	621° 9	627° 5	631° 4	630° 2	627° 0	615° 8	615° 0	619° 0	615° 3	615° 0	624° 0	628° 8		
619° 8	621° 0	629° 8	630° 0	629° 8	621° 3	616° 0	615° 5	619° 0	617° 0	616° 0	622° 5	627° 6		
619° 0	619° 0	631° 4	630° 2	629° 8	621° 9	618° 0	618° 5	619° 2	618° 8	617° 0	620° 0	628° 0		
616° 9	620° 2	633° 5	630° 8	628° 8	619° 1	619° 1	623° 0	618° 5	623° 0	618° 0	619° 8	625° 2		
617° 0	622° 5	631° 0	629° 8	628° 0	618° 4	621° 0	619° 0	618° 5	619° 5	620° 0	621° 2	625° 4		
616° 0	619° 8	631° 3	629° 2	628° 2	617° 9	621° 0	619° 0	617° 8	622° 0	623° 5	622° 2	628° 6		
618° 0	620° 0	631° 0	631° 4	628° 7	626° 2	621° 2	619° 4	618° 5	624° 5	623° 0	621° 8	627° 8		
619° 0	622° 2	632° 5	630° 0	628° 1	615° 8	619° 4	620° 4	617° 0	625° 0	621° 0	622° 2	626° 2		
623° 0	622° 2	631° 0	629° 0	628° 0	614° 0	620° 0	618° 0	616° 5	619° 5	622° 0	627° 0	628° 0		
625° 0	622° 0	633° 5	629° 2	628° 0	615° 0	619° 2	616° 0	618° 5	624° 0	625° 0	626° 2	630° 0		
627° 0	626° 2	632° 4	631° 0	628° 2	616° 0	618° 0	617° 0	617° 0	613° 0	619° 8	629° 4	628° 8		
626° 0	629° 8	631° 5	632° 5	627° 1	616° 0	615° 8	616° 0	616° 0	611° 2	617° 0	630° 2	629° 5		
45° 3	45° 5	45° 6	45° 6	45° 5	44° 9	44° 7	45° 2	46° 0	46° 2	46° 2	46° 6	47° 2		

VERTICAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.	
185° 4	185° 3	185° 8	186° 5	187° 1	188° 0	187° 7	190° 4	193° 0	191° 3	190° 7	193° 9	193° 8		
185° 4	185° 3	185° 8	186° 5	188° 0	188° 0	187° 7	190° 4	193° 0	191° 3	190° 7	193° 9	193° 8		
184° 1	185° 3	185° 6	186° 4	187° 9	188° 0	187° 7	191° 2	193° 0	191° 1	191° 5	193° 7	193° 1		
184° 1	185° 4	187° 4	187° 8	187° 9	187° 7	187° 7	191° 2	193° 0	191° 5	191° 5	193° 7	193° 1		
184° 1	185° 4	187° 6	187° 8	187° 9	187° 7	187° 7	191° 2	192° 5	191° 5	191° 5	193° 7	193° 2		
184° 1	185° 4	187° 6	187° 2	188° 0	187° 7	187° 8	192° 2	192° 5	192° 5	191° 5	193° 7	193° 2		
184° 1	186° 2	187° 6	187° 2	188° 0	187° 7	187° 8	192° 2	192° 4	192° 5	191° 5	191° 3	192° 8		
185° 1	186° 2	187° 3	187° 1	188° 0	187° 7	189° 8	192° 2	192° 5	192° 5	192° 1	193° 8	192° 8		
185° 9	186° 2	187° 1	186° 8	188° 0	187° 7	189° 8	193° 0	191° 3	192° 1	192° 1	193° 8	192° 6		
185° 9	185° 3	187° 1	186° 8	188° 0	187° 7	189° 8	193° 1	192° 0	190° 7	193° 1	193° 6	193° 6		
186° 4	186° 1	186° 9	186° 6	188° 0	187° 7	190° 4	192° 9	191° 6	190° 7	193° 1	193° 6	192° 4		
186° 4	186° 1	186° 5	187° 6	188° 0	187° 7	190° 4	192° 9	191° 5	190° 7	192° 8	194° 0	192° 6		
46° 7	46° 9	46° 8	47° 4	47° 2	47° 0	46° 7	46° 0	46° 4	46° 7	46° 6	46° 8	47° 0		

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.				
D.	H.	M.		Dry.	Wet.	Direction.	Force.					
			In.	°	°							
26	22	0	29° 758	22° 5	21° 2	W.S.W.	Light.	Cloudy; cir.-cum. and cir.-strat.				
23	0		29° 724	25° 0	23° 2	W.S.W.	Light.	Cloudy; cir.-cum. and cir.-strat.				
27	0	0	29° 677	24° 6	22° 9	W. by S.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.				
	1	0	29° 660	25° 4	23° 6	S.W. by S.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze; snow.				
	2	0	29° 645	26° 5	24° 5	S.W.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze; snow.				
	3	0	29° 621	27° 5	25° 3	S.W. by W.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze.				
	4	0	29° 622	26° 7	25° 5	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze.				
	5	0	29° 594	27° 8	25° 9	S.W. by W.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.				
	6	0	29° 556	27° 8	25° 9	W.S.W.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.				
	7	0	29° 544	30° 8	28° 2	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze; snow.				
	8	0	29° 533	31° 6	29° 3	W. by S.	Moderate, with gusts.	Cloudy; cir.-strat., cir.-cum., and haze; snow.				
	9	0	29° 539	31° 2	29° 3	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze; snow.				

December 22nd and 23rd.											
MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.	Angular Value of one Scale Division = 0° 721.						DECLINATION.				
	10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	106°9	106°6	134°2	107°6	110°5	113°5	114°0	114°4	121°6	105°6	116°4
5 0	108°3	106°6	132°4	104°5	111°1	113°4	113°6	116°8	121°6	107°2	116°9
10 0	107°5	107°4	138°4	106°4	112°3	113°4	113°2	117°6	117°8	109°0	116°5
15 0	106°9	108°5	142°0	107°1	111°4	113°4	112°4	117°0	116°2	110°6	114°8
20 0	105°5	108°4	132°6	107°3	112°3	113°6	112°4	117°4	108°4	110°7	113°3
25 0	104°2	109°4	123°6	106°8	112°8	113°6	112°8	120°2	107°0	112°1	110°9
30 0	104°4	109°6	123°4	108°6	112°4	113°6	113°4	121°4	104°4	111°2	111°3
35 0	104°8	112°3	119°4	110°7	112°5	113°6	113°4	120°6	105°0	113°0	111°5
40 0	105°5	119°9	114°0	110°4	112°6	113°4	113°6	120°0	105°8	112°4	110°9
45 0	106°6	120°9	109°4	110°9	112°9	113°2	112°8	121°4	105°2	112°3	112°6
50 0	106°9	121°9	107°4	110°6	113°5	113°2	112°6	121°6	105°2	114°6	113°6
55 0	107°0	125°4	108°9	110°9	113°4	113°4	112°4	120°4	105°4	116°3	112°4
One Scale Division = 0°00087 parts of the H. F.											
HORIZONTAL FORCE.											
M. S.	635°8	641°0	655°0	642°0	638°0	640°0	636°5	624°2	624°4	633°2	636°1
2 0	640°0	642°5	651°0	636°0	638°5	639°0	636°0	623°4	622°2	633°6	637°5
7 0	640°2	644°0	640°0	636°5	636°5	638°0	636°0	624°8	618°8	634°0	637°0
12 0	643°2	641°0	647°0	635°9	641°0	639°0	636°2	626°5	619°2	636°0	639°4
17 0	647°8	641°2	647°0	636°9	611°0	639°0	635°4	625°5	617°0	636°2	640°2
22 0	646°0	643°1	649°0	636°0	629°5	639°0	635°0	624°8	619°2	637°8	640°0
27 0	637°5	643°8	654°0	635°0	639°0	638°5	634°8	624°0	622°8	636°0	638°3
32 0	636°2	637°5	651°5	636°0	637°5	638°5	634°0	623°2	621°8	640°1	640°2
37 0	639°5	638°5	649°0	638°5	638°0	638°5	633°2	620°0	626°8	639°2	635°8
42 0	637°0	634°5	643°0	641°0	647°3	637°2	632°0	620°8	628°8	635°5	636°7
47 0	640°1	642°0	638°8	640°2	638°0	637°5	631°8	621°5	630°8	635°5	634°0
52 0	641°0	643°0	638°2	639°2	639°0	636°8	631°2	622°2	633°8	635°3	638°2
57 0											
Thermometer	42°5	43°0	43°0	42°5	41°5	41°1	41°4	41°8	41°2	41°5	41°5
One Scale Division = 0°00063 parts of the V. F.											
VERTICAL FORCE.											
M. S.	201°7	198°5	199°4	199°0	198°8	198°5	199°4	198°4	198°0	195°6	192°3
3 0	201°0	198°6	198°4	199°1	198°8	198°5	199°4	198°4	198°0	195°2	193°1
8 0	200°8	198°7	198°2	199°1	198°8	198°5	199°4	199°5	198°0	195°2	193°4
13 0	201°1	198°7	197°3	199°1	198°8	199°1	199°4	199°5	197°9	195°2	194°3
18 0	202°2	198°8	196°5	199°1	198°8	198°9	199°4	199°5	197°4	194°9	194°3
23 0	201°6	199°4	197°0	199°1	198°5	198°9	198°5	198°6	196°4	194°9	193°8
28 0	200°5	199°4	197°4	199°1	198°5	198°9	198°5	198°1	196°3	194°9	193°8
33 0	199°0	198°3	197°2	199°1	198°5	198°9	198°5	198°3	197°1	195°9	193°8
38 0	199°0	199°0	197°2	199°1	198°5	198°9	198°5	198°0	197°9	195°7	193°8
43 0	198°8	198°7	197°6	199°1	198°5	199°4	198°6	197°3	197°8	193°7	193°8
48 0	198°6	199°3	197°8	199°1	198°5	199°4	198°1	198°0	197°8	192°8	193°8
53 0	198°6	200°4	198°5	199°1	198°5	199°4	199°4	198°0	196°4	192°8	194°4
58 0											
Thermometer	41°6	42°7	43°4	43°3	42°4	42°2	42°2	42°2	42°2	42°2	42°5

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.	
22	10	0	29°221	25°0	22°9		N.W.	Very light.	Cloudy; cir.-cum. and haze.
	11	0	29°255	24°4	21°6		N.W.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.
	12	0	29°291	21°3	19°5		N.W.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.
	13	0	29°317	19°6	17°5		N.W.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.
	14	0	29°345	19°6	16°8		N.W.	Moderate.	Cloudy; cir.-cum. and haze.
	15	0	29°349	18°4	16°4		W.	Light.	Cloudy; cir.-cum. and haze.
	16	0	29°356	18°6	17°0		W.	Light.	Cloudy; cir.-cum. and haze.
	17	0	29°382	19°0	17°5		W. by N.	Very light.	Cloudy; cir.-cum. and haze.
	18	0	29°358	17°7	16°1		W. by N.	Light.	Cloudy; cir.-cum. and haze.
	19	0	29°358	17°3	15°8		W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
	20	0	29°357	17°3	16°0		W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
	21	0	29°349	17°2	16°0		W.S.W.	Very light.	Cloudy; cir.-cum. and haze.

* At 23° 10°, Thermometer of H. F., 40° 5; of V. F., 40° 3.

December 22nd and 23rd.

	19 ^b .	20 ^a .
Sc. Div.	Sc. Div.	
105'6	116'4	
107'2	116'9	
109'0	116'5	
110'6	114'8	
110'7	114'3	
112'1	110'9	
111'2	111'3	
113'0	111'5	
112'4	110'9	
112'3	112'6	
114'6	113'6	
116'3	112'4	

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature. 1'63.

633'2	636'1
633'6	637'5
634'0	637'0
636'0	639'4
636'2	640'2
637'8	640'0
636'0	638'3
640'1	640'2
639'2	635'8
635'5	636'7
635'5	634'0
635'3	638'2
41'5	41'5

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.

195'6	192'3
195'2	193'1
195'2	193'4
195'2	194'3
194'9	194'3
194'9	193'8
194'9	193'8
195'9	193'8
195'7	193'8
193'7	193'8
192'8	193'8
192'8	194'4
42'2	42'5

Using Westerly Declination

1000

Weather.

January 19th and 20th.			MAGNETICAL OBSERVATIONS.									
Mean Göttingen Time.			Angular Value of one Scale Division = 0° 721.						DECLINATION.			
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		106° 8	107° 5	107° 6	109° 7	114° 0	116° 1	113° 3	113° 4	111° 3	112° 6
5	0		107° 4	107° 6	107° 4	110° 0	117° 6	115° 3	113° 0	113° 2	111° 4	112° 3
10	0		107° 1	107° 8	107° 5	110° 1	119° 0	114° 4	112° 4	113° 4	111° 7	109° 6
15	0		106° 7	107° 4	107° 6	111° 3	118° 4	113° 5	112° 0	112° 6	112° 5	110° 4
20	0		106° 0	107° 0	109° 0	111° 8	119° 0	113° 0	112° 4	112° 4	112° 7	111° 4
25	0		105° 4	107° 8	108° 6	113° 4	118° 0	112° 6	112° 3	112° 3	113° 2	110° 4
30	0		104° 4	108° 0	108° 5	115° 4	117° 4	112° 2	112° 3	111° 7	113° 0	110° 4
35	0		104° 4	108° 4	109° 2	115° 4	116° 9	112° 4	112° 5	111° 4	111° 6	110° 2
40	0		105° 7	108° 9	109° 4	114° 0	117° 4	112° 3	112° 4	111° 3	112° 4	110° 2
45	0		107° 0	109° 0	109° 6	113° 3	117° 4	112° 9	112° 5	111° 2	112° 3	111° 4
50	0		107° 8	109° 8	109° 5	112° 3	118° 0	113° 4	112° 9	111° 7	112° 6	113° 2
55	0		107° 5	109° 0	110° 0	112° 3	117° 4	113° 4	112° 4	111° 5	113° 2	107° 4
One Scale Division = 0° 00087 parts of the H. F.												
M.	S.		HORIZONTAL FORCE.									
2	0		645° 0	648° 0	649° 0	649° 0	645° 0	649° 2	647° 5	650° 2	648° 0	643° 0
7	0		648° 0	646° 5	649° 2	648° 0	646° 0	648° 5	647° 5	649° 0	646° 0	643° 5
12	0		645° 8	646° 8	646° 0	646° 0	646° 0	647° 0	647° 0	648° 5	645° 0	643° 0
17	0		650° 0	649° 0	645° 8	645° 2	644° 6	648° 8	647° 2	649° 5	644° 8	641° 4
22	0		649° 2	648° 8	648° 0	645° 3	645° 0	648° 0	647° 5	650° 0	643° 9	643° 2
27	0		648° 0	649° 2	648° 0	644° 8	645° 5	648° 5	646° 5	649° 0	645° 0	643° 2
32	0		646° 8	651° 0	646° 8	646° 9	645° 0	646° 2	647° 0	649° 8	646° 1	645° 0
37	0		647° 8	650° 5	647° 0	648° 8	645° 2	646° 0	648° 5	650° 0	645° 0	642° 0
42	0		648° 0	648° 2	645° 8	651° 1	645° 5	646° 2	649° 0	650° 2	644° 0	642° 0
47	0		650° 0	651° 0	648° 0	650° 2	649° 0	646° 0	649° 0	649° 5	645° 0	644° 4
52	0		650° 0	651° 0	648° 4	649° 9	648° 0	646° 5	649° 0	649° 0	643° 9	644° 2
57	0		648° 2	651° 0	650° 0	647° 1	649° 0	646° 0	649° 0	649° 0	643° 0	639° 7
Thermometer			39° 5	39° 4	39° 2	39° 4	38° 9	38° 5	38° 6	39° 0	39° 5	40° 0
			One Scale Division = 0° 00063 parts of the V. F.									
M.	S.		VERTICAL FORCE.									
3	0		196° 2	198° 6	194° 0	194° 2	194° 1	195° 1	194° 0	194° 2	192° 3	189° 1
8	0		196° 6	198° 6	194° 1	194° 2	194° 1	194° 7	194° 0	194° 2	192° 3	188° 2
13	0		196° 8	198° 6	194° 4	194° 5	194° 8	194° 7	194° 0	194° 2	192° 3	186° 3
18	0		198° 7	196° 9	194° 4	194° 5	194° 8	194° 7	193° 9	194° 2	192° 0	185° 2
23	0		198° 7	196° 9	194° 4	196° 0	194° 6	194° 0	193° 9	194° 2	192° 0	184° 7
28	0		198° 7	196° 9	194° 4	196° 0	194° 6	194° 0	193° 9	194° 2	192° 0	185° 5
33	0		196° 9	196° 9	194° 2	195° 3	194° 8	193° 8	193° 9	194° 2	192° 0	183° 5
38	0		196° 9	196° 6	194° 2	195° 3	194° 8	193° 8	195° 0	194° 2	191° 9	183° 5
43	0		198° 2	194° 3	194° 2	194° 7	194° 8	194° 0	195° 0	194° 2	191° 1	183° 5
48	0		198° 2	194° 3	194° 2	194° 1	195° 1	194° 0	195° 0	194° 2	191° 1	183° 3
53	0		198° 2	194° 3	194° 5	194° 1	195° 1	194° 0	195° 0	194° 2	190° 1	183° 3
58	0		198° 6	194° 3	194° 2	194° 1	195° 1	194° 0	194° 2	194° 2	190° 1	182° 6
Thermometer			39° 1	39° 1	39° 5	40° 0	40° 1	39° 9	40° 4	39° 6	40° 2	40° 6
Increasing Numbers denote decreasing Westerly Declination.												
METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Thermometers.		Wind.		Weather.					
			Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.									
19	10	0	30° 144	21° 9	20° 0	S.S.E.	Very light.	Mostly clear.				
11	0		30° 106	21° 1	20° 5	S.E. by S.	Very light.	Cir.-cum. and cum.-strat.				
12	0		30° 076	20° 6	19° 9	S.S.E.	Very light.	Cir.-strat. and cum.-strat.				
13	0		30° 050	23° 6	21° 2	S.	Moderate.	Cir.-cum. and cir.-strat.				
14	0		30° 026	23° 8	21° 9	S.	Moderate.	Cir.-cum. and haze.				
15	0		29° 986	24° 6	22° 9	S. by E.	Moderate.	Clear and unclouded.				
16	0		29° 952	25° 3	23° 4	S. by E.	Moderate.	Clear and unclouded.				
17	0		29° 896	25° 0	23° 6	S.	Light.	Clear and unclouded.				
18	0		29° 862	26° 3	24° 0	S.S.W.	Light.	Clear.				
19	0		29° 858	25° 5	23° 4	S.S.W.	Light.	Clear.				
20	0		29° 868	25° 5	23° 4	S.S.W.	Very light.	Clear.				
21	0		29° 853	27° 4	24° 5	S.W. by S.	Very light.	Clear.				

* At 204 10^h, Thermometer of H. F., 48° 14'; of V. F., 47° 12'.

DECLINATION.	
19 ^h .	20 ^h .
Sc. Div.	Sc. Div.
112°6	104°4
112°3	102°0
108°6	102°2
110°4	101°4
111°4	102°2
110°4	104°4
110°4	103°2
110°2	105°8
110°2	106°6
111°4	105°4
113°2	107°2
107°4	107°4

HORIZONTAL FORCE.	
643°0	639°8
643°5	640°0
643°0	635°0
641°4	634°2
643°2	630°0
643°2	631°2
645°0	631°0
642°0	636°1
642°0	638°0
641°4	641°6
644°2	645°5
639°7	645°8

VERTICAL FORCE.	
189°1	182°3
188°2	181°7
186°3	180°3
185°2	180°3
181°7	179°5
183°5	179°3
183°5	179°3
183°5	181°1
183°5	181°3
183°3	181°5
183°3	181°2
182°6	181°2

using Westerly Declination.

rather.

MAGNETICAL OBSERVATIONS.												January 19th and 20th.	
DECLINATION.						Angular Value of one Scale Division = 0°721.							
21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
107°6	117°4	112°2	112°5	112°4	118°2	118°3	117°6	110°6	111°0	107°6	103°8	103°2	
108°5	117°5	112°4	113°4	112°6	118°2	119°4	116°0	109°4	110°4	107°8	104°1	103°0	
108°8	116°6	111°8	113°6	113°4	118°4	117°6	115°6	111°1	109°5	107°4	104°3	102°7	
109°6	115°5	111°9	112°5	113°3	116°8	121°4	114°0	111°4	109°6	107°4	105°2	102°9	
111°8	115°4	111°5	112°4	112°8	116°1	121°6	113°4	110°8	110°2	106°4	105°3	103°3	
113°8	113°7	111°5	112°8	114°8	116°1	119°4	113°0	112°2	109°4	105°8	105°3	103°4	
114°5	113°5	111°2	111°4	116°0	116°0	124°0	113°4	111°5	109°4	105°4	105°3	104°3	
115°4	113°6	111°4	111°2	115°5	117°8	122°0	113°3	111°2	109°6	105°4	105°8	104°2	
115°8	113°4	111°4	110°6	115°8	119°4	123°4	114°0	111°4	108°6	105°0	105°4	104°4	
116°0	113°4	110°7	111°6	115°8	119°2	121°0	112°9	111°9	108°6	104°6	104°0	104°6	
116°6	112°5	111°4	110°7	115°4	119°0	120°4	112°5	111°5	107°8	103°8	103°4	101°2	
116°8	112°2	113°5	112°5	117°0	117°3	118°6	112°1	111°5	107°4	103°4	103°3	104°6	
HORIZONTAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.	
646°8	649°8	646°0	643°3	640°0	646°0	642°0	639°0	627°0	628°5	633°2	638°2	642°0	
651°8	650°2	643°5	641°0	645°0	645°8	641°2	638°0	623°0	630°0	635°8	635°0	640°0	
650°6	649°8	645°8	641°2	644°0	646°0	639°5	636°5	622°0	628°0	637°4	636°0	639°0	
650°2	650°4	648°0	643°1	644°0	647°5	641°7	637°0	619°5	629°0	634°8	634°0	637°6	
650°2	649°0	646°9	644°0	643°0	648°0	644°5	635°5	618°5	622°0	636°2	634°1	639°1	
650°3	650°0	646°8	643°2	645°0	645°0	645°2	634°0	620°0	631°0	636°8	633°7	634°0	
650°2	648°7	645°5	643°2	646°8	645°4	647°0	631°2	621°0	632°8	636°6	632°9	633°9	
650°0	650°0	644°2	641°0	646°8	643°0	643°5	629°0	622°0	632°8	637°8	633°0	634°9	
650°0	647°3	645°0	643°1	647°0	646°0	642°5	631°0	623°0	633°0	637°0	635°0	631°4	
646°8	646°0	646°2	639°8	646°2	646°4	645°5	630°0	623°5	634°2	638°2	640°2	634°0	
647°2	647°4	643°2	645°0	645°0	641°0	641°0	627°5	625°0	635°0	639°0	642°0	630°1	
647°8	646°0	643°1	645°0	645°0	641°2	639°5	628°0	627°0	636°2	638°0	644°1	628°0	
41°6	41°6	42°5	43°0	43°1	42°8	42°7	43°5	44°9	45°1	45°6	46°4	47°5*	
VERTICAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.	
180°8	183°3	185°0	186°9	186°7	185°4	186°3	186°3	185°9	186°6	185°5	184°5	184°2	
181°5	184°8	184°0	186°7	185°0	185°4	187°1	186°3	185°9	186°6	185°5	184°3	184°2	
181°5	185°0	184°4	186°5	185°0	185°4	187°1	186°3	185°9	186°6	185°5	184°1	183°9	
181°2	185°6	185°0	186°5	185°0	185°4	187°6	186°3	185°9	186°6	185°2	183°3	184°0	
181°2	185°6	185°0	186°5	185°0	185°5	187°6	186°3	185°9	186°3	185°2	183°3	183°1	
180°9	185°6	185°0	186°5	185°0	185°5	187°6	186°3	185°9	186°3	185°2	183°3	182°4	
180°9	185°6	185°0	186°5	185°0	185°5	187°6	186°3	185°9	186°0	185°2	182°4	182°4	
180°9	185°6	185°0	187°0	185°2	185°5	187°6	186°3	186°0	185°5	185°2	182°4	182°4	
180°8	185°6	185°0	187°0	185°2	185°5	187°1	185°9	186°3	185°5	184°8	183°2	182°4	
180°8	185°4	185°5	187°0	185°0	185°5	186°3	185°9	186°6	185°5	184°9	184°2	182°2	
181°2	185°6	185°6	187°0	185°0	185°6	186°3	185°9	186°6	185°5	184°8	184°2	181°5	
181°2	185°4	185°6	186°7	185°4	186°3	186°3	185°9	186°6	185°5	184°7	184°2	181°5	
41°5	41°5	42°3	42°9	43°5	43°0	43°1	43°4	44°4	44°7	44°8	45°3	46°5*	

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.									
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.	
				Dry.	Wet.	Direction.	Force.		
D.	H.	M.	In.	°	°				
19	22	0	29°825	27°9	24°9	S.W. by S.	Very light.	Cir.-cum. and haze.	
	23	0	29°814	29°2	26°1	S.W. by S.	Very light.	Cir.-cum. and cir.-strat.	
20	0	0	29°822	29°7	26°6	S.W. by S.	Very light.	Mostly clear.	
	1	0	29°811	30°2	27°1	S.S.W.	Very light.	Clear and unclouded.	
	2	0	29°820	30°4	27°3	S. by W.	Very light.	Clear and unclouded.	
	3	0	29°825	33°5	29°5	S. by W.	Light.	Cir.-strat. and haze.	
	4	0	29°829	36°0	31°9	S. by W.	Light.	Cir.-strat. and cir.-cum.	
	5	0	29°811	37°6	32°2	S. by W.	Light.	Clear and unclouded.	
	6	0	29°776	38°5	32°9	S. by W.	Light.	Clear and unclouded.	
	7	0	29°758	38°8	33°6	S. by W.	Very light.	Clear.	
	8	0	29°723	40°6	35°5	S. by W.	Very light.	Clear.	
	9	0	29°705	41°9	37°0	S. by W.	Very light.	Clear.	

February 25th and 26th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	
0	0	112° 4	117° 3	121° 0	112° 4	115° 4	120° 8	119° 8	116° 5	115° 6	116° 4	115° 8	
5	0	113° 6	117° 2	125° 6	112° 6	115° 8	127° 4	120° 4	116° 7	115° 4	116° 3	116° 0	
10	0	114° 2	117° 9	137° 6	112° 6	116° 2	129° 5	121° 0	117° 3	115° 8	116° 3	116° 0	
15	0	114° 2	117° 4	143° 7	112° 6	115° 6	133° 4	120° 4	117° 5	115° 4	116° 4	117° 4	
20	0	114° 6	118° 6	139° 2	113° 0	115° 5	132° 4	117° 4	117° 4	116° 3	116° 3	116° 0	
25	0	114° 4	119° 4	134° 5	112° 4	115° 4	127° 2	115° 5	116° 7	117° 1	115° 9	116° 2	
30	0	114° 4	119° 4	127° 0	113° 4	115° 8	119° 8	114° 8	116° 8	117° 3	115° 9	116° 4	
35	0	114° 2	119° 2	121° 0	114° 0	118° 4	118° 2	114° 8	116° 6	116° 7	115° 9	116° 2	
40	0	114° 7	119° 4	118° 6	114° 4	119° 2	119° 2	115° 4	116° 5	117° 5	115° 8	116° 8	
45	0	116° 4	119° 1	117° 4	114° 8	120° 4	120° 4	116° 8	116° 4	118° 9	116° 0	117° 0	
50	0	116° 5	119° 4	115° 6	115° 4	118° 6	121° 2	117° 2	116° 6	117° 3	115° 9	117° 2	
55	0	117° 4	118° 4	112° 8	115° 4	118° 8	119° 4	116° 6	116° 7	116° 7	115° 4	117° 2	

M. S.		One Scale Division = '000087 parts of the H. F.												HORIZONTAL FORCE.					
		634° 0	631° 0	619° 0	632° 0	636° 2	626° 2	631° 4	634° 2	636° 3	633° 1	635° 0							
2	0	635° 0 <td>631° 0<td>619° 0<td>631° 4<td>637° 8<td>629° 3<td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td></td></td></td></td></td>	631° 0 <td>619° 0<td>631° 4<td>637° 8<td>629° 3<td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td></td></td></td></td>	619° 0 <td>631° 4<td>637° 8<td>629° 3<td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td></td></td></td>	631° 4 <td>637° 8<td>629° 3<td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td></td></td>	637° 8 <td>629° 3<td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td></td>	629° 3 <td>631° 0<td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td></td>	631° 0 <td>635° 0<td>634° 0<td>632° 1<td>635° 0</td></td></td></td>	635° 0 <td>634° 0<td>632° 1<td>635° 0</td></td></td>	634° 0 <td>632° 1<td>635° 0</td></td>	632° 1 <td>635° 0</td>	635° 0							
7	0	631° 5 <td>630° 0<td>626° 5<td>631° 8<td>637° 5<td>630° 8<td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td></td></td></td></td></td>	630° 0 <td>626° 5<td>631° 8<td>637° 5<td>630° 8<td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td></td></td></td></td>	626° 5 <td>631° 8<td>637° 5<td>630° 8<td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td></td></td></td>	631° 8 <td>637° 5<td>630° 8<td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td></td></td>	637° 5 <td>630° 8<td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td></td>	630° 8 <td>633° 0<td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td></td>	633° 0 <td>636° 0<td>634° 2<td>633° 0<td>634° 0</td></td></td></td>	636° 0 <td>634° 2<td>633° 0<td>634° 0</td></td></td>	634° 2 <td>633° 0<td>634° 0</td></td>	633° 0 <td>634° 0</td>	634° 0							
12	0	631° 5 <td>629° 0<td>638° 0<td>632° 0<td>638° 0<td>636° 6<td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td></td></td></td></td></td>	629° 0 <td>638° 0<td>632° 0<td>638° 0<td>636° 6<td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td></td></td></td></td>	638° 0 <td>632° 0<td>638° 0<td>636° 6<td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td></td></td></td>	632° 0 <td>638° 0<td>636° 6<td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td></td></td>	638° 0 <td>636° 6<td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td></td>	636° 6 <td>636° 2<td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td></td>	636° 2 <td>635° 6<td>633° 8<td>635° 0<td>636° 0</td></td></td></td>	635° 6 <td>633° 8<td>635° 0<td>636° 0</td></td></td>	633° 8 <td>635° 0<td>636° 0</td></td>	635° 0 <td>636° 0</td>	636° 0							
17	0	634° 0 <td>629° 5<td>641° 0<td>631° 8<td>634° 2<td>641° 2<td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td></td></td></td></td></td>	629° 5 <td>641° 0<td>631° 8<td>634° 2<td>641° 2<td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td></td></td></td></td>	641° 0 <td>631° 8<td>634° 2<td>641° 2<td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td></td></td></td>	631° 8 <td>634° 2<td>641° 2<td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td></td></td>	634° 2 <td>641° 2<td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td></td>	641° 2 <td>637° 3<td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td></td>	637° 3 <td>635° 0<td>635° 0<td>634° 0<td>635° 8</td></td></td></td>	635° 0 <td>635° 0<td>634° 0<td>635° 8</td></td></td>	635° 0 <td>634° 0<td>635° 8</td></td>	634° 0 <td>635° 8</td>	635° 8							
22	0	630° 0 <td>630° 0<td>642° 2<td>631° 8<td>633° 8<td>641° 2<td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td></td></td></td></td></td>	630° 0 <td>642° 2<td>631° 8<td>633° 8<td>641° 2<td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td></td></td></td></td>	642° 2 <td>631° 8<td>633° 8<td>641° 2<td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td></td></td></td>	631° 8 <td>633° 8<td>641° 2<td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td></td></td>	633° 8 <td>641° 2<td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td></td>	641° 2 <td>636° 0<td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td></td>	636° 0 <td>634° 3<td>634° 0<td>634° 0<td>636° 0</td></td></td></td>	634° 3 <td>634° 0<td>634° 0<td>636° 0</td></td></td>	634° 0 <td>634° 0<td>636° 0</td></td>	634° 0 <td>636° 0</td>	636° 0							
27	0	633° 0 <td>628° 0<td>639° 0<td>632° 0<td>628° 8<td>641° 2<td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td></td></td></td></td></td>	628° 0 <td>639° 0<td>632° 0<td>628° 8<td>641° 2<td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td></td></td></td></td>	639° 0 <td>632° 0<td>628° 8<td>641° 2<td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td></td></td></td>	632° 0 <td>628° 8<td>641° 2<td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td></td></td>	628° 8 <td>641° 2<td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td></td>	641° 2 <td>634° 0<td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td></td>	634° 0 <td>634° 0<td>633° 8<td>635° 0<td>636° 4</td></td></td></td>	634° 0 <td>633° 8<td>635° 0<td>636° 4</td></td></td>	633° 8 <td>635° 0<td>636° 4</td></td>	635° 0 <td>636° 4</td>	636° 4							
32	0	633° 2 <td>628° 0<td>639° 0<td>631° 8<td>626° 2<td>634° 2<td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td></td></td></td></td></td>	628° 0 <td>639° 0<td>631° 8<td>626° 2<td>634° 2<td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td></td></td></td></td>	639° 0 <td>631° 8<td>626° 2<td>634° 2<td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td></td></td></td>	631° 8 <td>626° 2<td>634° 2<td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td></td></td>	626° 2 <td>634° 2<td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td></td>	634° 2 <td>633° 0<td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td></td>	633° 0 <td>634° 0<td>633° 0<td>634° 8<td>636° 5</td></td></td></td>	634° 0 <td>633° 0<td>634° 8<td>636° 5</td></td></td>	633° 0 <td>634° 8<td>636° 5</td></td>	634° 8 <td>636° 5</td>	636° 5							
37	0	632° 8 <td>629° 0<td>633° 0<td>632° 8<td>626° 0<td>632° 2<td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td></td></td>	629° 0 <td>633° 0<td>632° 8<td>626° 0<td>632° 2<td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td></td>	633° 0 <td>632° 8<td>626° 0<td>632° 2<td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td>	632° 8 <td>626° 0<td>632° 2<td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td></td></td>	626° 0 <td>632° 2<td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td></td>	632° 2 <td>632° 8<td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td></td>	632° 8 <td>633° 9<td>632° 0<td>635° 0<td>637° 0</td></td></td></td>	633° 9 <td>632° 0<td>635° 0<td>637° 0</td></td></td>	632° 0 <td>635° 0<td>637° 0</td></td>	635° 0 <td>637° 0</td>	637° 0							
42	0	632° 0 <td>626° 0<td>634° 2<td>633° 0<td>628° 2<td>630° 8<td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td></td></td></td></td></td>	626° 0 <td>634° 2<td>633° 0<td>628° 2<td>630° 8<td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td></td></td></td></td>	634° 2 <td>633° 0<td>628° 2<td>630° 8<td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td></td></td></td>	633° 0 <td>628° 2<td>630° 8<td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td></td></td>	628° 2 <td>630° 8<td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td></td>	630° 8 <td>634° 0<td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td></td>	634° 0 <td>634° 0<td>634° 1<td>636° 8<td>637° 2</td></td></td></td>	634° 0 <td>634° 1<td>636° 8<td>637° 2</td></td></td>	634° 1 <td>636° 8<td>637° 2</td></td>	636° 8 <td>637° 2</td>	637° 2							
47	0	632° 0 <td>625° 0<td>636° 9<td>633° 8<td>628° 8<td>635° 0<td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td></td></td></td></td></td>	625° 0 <td>636° 9<td>633° 8<td>628° 8<td>635° 0<td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td></td></td></td></td>	636° 9 <td>633° 8<td>628° 8<td>635° 0<td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td></td></td></td>	633° 8 <td>628° 8<td>635° 0<td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td></td></td>	628° 8 <td>635° 0<td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td></td>	635° 0 <td>635° 2<td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td></td>	635° 2 <td>635° 9<td>634° 2<td>635° 0<td>637° 2</td></td></td></td>	635° 9 <td>634° 2<td>635° 0<td>637° 2</td></td></td>	634° 2 <td>635° 0<td>637° 2</td></td>	635° 0 <td>637° 2</td>	637° 2							
52	0	631° 0 <td>623° 0<td>633° 2<td>634° 8<td>628° 0<td>632° 8<td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td></td></td>	623° 0 <td>633° 2<td>634° 8<td>628° 0<td>632° 8<td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td></td>	633° 2 <td>634° 8<td>628° 0<td>632° 8<td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td></td></td></td>	634° 8 <td>628° 0<td>632° 8<td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td></td></td>	628° 0 <td>632° 8<td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td></td>	632° 8 <td>635° 0<td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td></td>	635° 0 <td>636° 8<td>633° 8<td>635° 0<td>637° 0</td></td></td></td>	636° 8 <td>633° 8<td>635° 0<td>637° 0</td></td></td>	633° 8 <td>635° 0<td>637° 0</td></td>	635° 0 <td>637° 0</td>	637° 0							
57	0																		
Thermometer		45° 0	45° 2	45° 0	45° 5	46° 6	46° 6	46° 3	45° 5	45° 7	45° 7	45° 6							

M. S.		One Scale Division = '000063 parts of the V. F.												VERTICAL FORCE.					
		190° 7	189° 7	189° 1	182° 8	181° 6	180° 6	178° 4	180° 6	182° 1	181° 4	181° 4							
3	0	190° 7	189° 5	189° 8	182° 8	181° 3	180° 6	178° 4	180° 6	181° 4	181° 4	181° 4							
8	0	189° 3	189° 5	189° 2	183° 1	181° 1	180° 3	178° 9	180° 6	181° 4	181° 4	181° 4							
13	0	189° 3	188° 8	187° 3	183° 1	180° 9	180° 3	179° 3	180° 6	181° 4	181° 4	181° 4							
18	0	189° 3	188° 8	185° 3	182° 7	180° 8	179° 9	179° 3	181° 6	181° 4	181° 4	181° 4							
23	0	188° 0	188° 8	183° 8	182° 7	180° 7	179° 7	179° 3	181° 6	181° 4	181° 4	181° 4							
28	0	188° 0	188° 8	184° 4	182° 0	180° 5	179° 7	178° 8	181° 6	181° 4	181° 5	181° 4							
33	0	188° 6	188° 8	183° 7	181° 2	180° 6	179° 7	179° 3	181° 7	181° 4	181° 5	181° 4							
38	0	189° 7	188° 8	183° 7	181° 5	180° 3	177° 8	179° 3	181° 7	181° 4	181° 5	181° 4							
43	0	189° 7	188° 8	185° 0	181° 3	180° 3	177° 8	179° 3	182° 4	181° 1	181° 5	181° 6							
48	0	189° 7	189° 1	184° 0	181° 4	180° 5	179° 1	179° 3	182° 4	181° 4	181° 5	181° 6							
53	0	189° 7	189° 1	184° 2	181° 3	180° 6	178° 4	180° 6	182° 4	181° 4	181° 5	181° 6							
58	0																		
Thermometer		43° 8	44° 3	44° 4	46° 4	47° 6	48° 2	48° 0	46° 7	46° 6	46° 6	45° 4							

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
25	10	0	30° 051	23° 4	20° 0	S.S.E.	Very light.	Generally clear.			
	11	0	30° 040	21° 5	19° 3	—	—	Clear.			
	12	0	30° 029	19° 2	18° 1	—	—	Clear.			
	13	0	30° 030	19° 1	17° 9	—	—	Clear.			
	14	0	30° 028	17° 6	16° 8	—	—	Clear.			
	15	0	30° 017	16° 0	15° 7	—	—	Clear.			
	16	0	30° 015	15° 5	15° 3	—	—	Clear.			
	17	0	30° 002	16° 0	15° 7	—	—	Clear.			
	18	0	29° 991	18° 1	16° 2	—	—	Clear.			
	19	0	29° 985	15° 1	14° 8	—	—	Clear.			
	20	0	29° 977	14° 5	14° 6	—	—	Clear.			
	21	0	29° 962	14° 3	14° 1	S.E. by S.	Very light.	Clear.			

* At 264 16^h, Thermometer of H.F., 47° 6'; of V.F., 47° 4.

ATION.

	19°.	20°.
Sec. Div.	Sec. Div.	Sec. Div.
116°8	116°8	115°8
116°3	116°3	116°0
116°3	116°3	116°0
116°4	116°4	117°4
116°3	116°3	116°0
115°9	115°9	116°2
115°9	115°9	116°4
115°9	115°9	116°2
115°8	115°8	116°8
116°0	116°0	117°0
115°9	115°9	117°2
115°4	115°4	117°2

NTAL FORCE.

633°1	635°0
632°1	635°0
633°0	634°0
635°0	636°0
634°0	635°8
634°0	636°0
635°0	636°4
634°8	636°5
635°0	637°0
636°8	637°2
635°0	637°2
635°0	637°0

45°7	45°6
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AL FORCE.

181°4	181°4
181°4	181°4
181°4	181°4
181°4	181°4
181°4	181°4
181°4	181°4
181°5	181°4
181°5	181°4
181°5	181°6
181°5	181°6
181°5	181°6

46°6	45°4
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creasing Westerly Declination,

Weather.

25	22	0
26	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0

MAGNETICAL OBSERVATIONS.

February 25th and 26th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
116°8	116°8	117°4	118°5	119°0	122°3	125°4	126°4	126°4	122°4	118°6	115°0	113°4
117°2	117°4	117°4	118°4	119°0	124°2	126°4	126°4	122°4	118°6	115°0	113°4	111°0
117°0	116°6	117°5	118°3	120°3	125°2	126°2	127°4	122°4	118°4	115°4	113°0	111°0
117°0	116°4	117°6	118°2	120°7	125°1	126°2	129°4	122°9	118°9	115°8	113°0	111°0
116°8	117°4	117°4	118°0	120°4	124°4	126°0	129°8	123°6	118°7	114°5	112°3	111°4
116°8	116°6	117°4	118°2	121°4	125°4	127°5	128°6	124°6	117°4	114°4	112°2	111°9
117°4	116°6	117°4	118°4	120°4	124°9	127°6	125°2	123°6	117°2	114°4	112°4	111°9
117°4	116°6	117°0	117°8	121°5	126°2	127°2	123°4	123°4	116°4	115°4	112°4	111°6
118°4	117°0	116°0	118°6	121°6	127°4	127°5	122°6	121°1	116°5	115°0	112°0	111°9
118°0	117°2	115°4	117°0	121°4	126°6	127°4	122°4	121°4	116°4	114°6	111°6	111°4
117°4	116°0	117°6	119°0	122°5	127°9	126°2	122°4	120°3	116°0	114°3	111°4	111°6
117°2	116°4	118°0	120°4	122°5	126°4	126°4	122°5	120°4	115°8	113°9	111°3	112°2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

636°0	637°5	640°0	645°5	647°0	645°0	639°5	630°0	624°0	611°3	614°0	618°0	623°0
636°0	637°0	640°0	644°0	647°0	645°5	640°4	630°0	620°8	608°0	611°0	618°0	628°0
636°4	638°0	640°0	644°0	644°0	645°0	638°8	626°4	620°8	611°8	611°0	618°0	628°0
637°0	638°0	640°0	641°0	644°0	645°0	638°8	623°0	618°5	610°0	610°0	620°0	626°5
636°9	638°0	642°2	641°5	645°0	645°0	637°8	620°3	617°4	612°2	611°0	620°5	627°0
635°0	638°0	642°0	643°5	644°0	646°0	636°0	617°8	615°8	612°0	613°8	622°0	626°5
634°8	638°0	642°0	644°0	642°8	644°3	635°5	619°5	615°0	612°0	614°0	620°0	626°5
636°0	639°0	642°5	642°5	644°0	641°0	635°5	617°8	616°2	612°0	613°0	620°0	626°5
635°8	639°0	643°0	641°5	645°0	643°5	634°4	619°6	616°2	610°0	614°5	620°5	630°0
639°0	642°0	644°0	640°0	644°0	644°0	635°2	620°2	613°7	607°0	618°0	622°0	629°0
639°2	640°0	642°5	641°0	644°0	641°0	634°0	621°6	614°1	611°0	616°5	623°0	626°0
639°0	641°0	642°5	642°5	646°0	640°0	631°2	621°8	613°3	612°2	615°0	625°0	626°0
44°2	43°8	43°5	43°3	42°7	43°5	45°2	46°1	46°1	45°9	46°0	46°3	46°7*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

181°6	181°4	180°6	184°5	183°5	186°1	181°8	177°9	180°6	181°5	180°9	183°4	180°9
181°6	181°4	180°6	184°5	183°5	186°1	181°8	177°9	179°5	181°5	181°1	183°4	180°9
181°6	181°4	180°6	184°5	184°9	186°1	181°8	177°8	179°3	181°5	181°1	183°4	180°9
181°6	182°5	179°5	184°5	184°9	186°1	180°7	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	184°9	184°9	180°4	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	185°5	184°8	180°3	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	185°5	184°4	180°3	177°7	179°3	181°1	181°1	183°4	180°9
181°6	182°5	179°5	184°8	186°1	184°5	179°7	179°7	180°9	181°1	181°1	183°4	180°9
181°6	182°5	178°7	179°5	186°2	184°5	179°3	180°6	181°5	181°0	182°6	183°4	180°9
181°6	182°3	178°5	182°0	186°2	185°0	179°2	180°6	181°5	181°0	183°4	181°8	180°9
181°6	182°3	178°5	182°0	186°2	184°4	179°2	180°6	181°5	181°0	183°4	181°8	180°9
181°6	181°0	178°5	182°0	186°2	183°3	177°9	180°6	181°5	181°0	183°4	181°8	180°9
45°4	45°5	46°4	46°4	44°3	44°0	46°3	46°2	46°5	46°3	46°4	46°4	47°1*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Weather.	Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
			Dry.	Wet.	Direction.	Force.	
	D. H. M.	In.	°	°			
	25 22 0	29°949	13°4	13°5	—	—	Calm.
	23 0	29°926	12°4	12°7	—	—	Calm.
	26 0 0	29°918	12°1	12°4	S.E. by E.	Very light.	Generally clear.
	1 0	29°920	12°2	12°3	S.E. by E.	Very light.	Generally clear.
	2 0	29°902	19°2	18°1	S.E. by E.	Very light.	Generally clear.
	3 0	29°883	26°3	24°1	S.E. by E.	Very light.	Generally clear.
	4 0	29°852	30°3	27°0	S.W. by S.	Very light.	Generally clear.
	5 0	29°827	31°1	26°7	S.W.	Light.	Clear.
	6 0	29°789	31°8	27°0	S.W.	Light.	Clear.
	7 0	29°744	33°5	27°7	S.S.W.	Light.	Clear.
	8 0	29°694	34°3	29°3	S.S.W.	Light.	Clear.
	9 0	29°656	34°3	29°6	S.W. by W.	Very light.	Clear.

March 22nd and 23rd.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.			
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	20°.
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
0	0	107° 8	108° 0	110° 4	109° 5	114° 6	115° 5	116° 4	114° 4	116° 9	117° 6
5	0	108° 0	107° 8	110° 6	108° 5	115° 4	115° 4	115° 8	114° 7	117° 6	117° 4
10	0	108° 4	107° 4	109° 8	110° 4	115° 8	116° 3	117° 0	116° 4	117° 5	117° 2
15	0	108° 3	107° 2	110° 0	110° 4	116° 0	116° 5	118° 0	117° 6	118° 3	117° 6
20	0	108° 8	108° 3	109° 4	111° 8	117° 7	116° 6	117° 7	117° 6	118° 4	117° 2
25	0	108° 4	108° 7	109° 4	113° 4	116° 2	117° 8	115° 7	117° 2	119° 0	116° 9
30	0	108° 3	109° 4	110° 1	114° 4	115° 4	119° 7	114° 0	116° 0	119° 4	116° 9
35	0	107° 7	108° 8	111° 3	116° 0	115° 8	119° 0	115° 0	117° 6	119° 4	116° 6
40	0	107° 6	109° 4	111° 3	117° 4	116° 4	116° 4	115° 8	117° 4	118° 4	116° 9
45	0	109° 2	108° 7	110° 6	117° 5	115° 9	114° 4	115° 4	117° 0	117° 4	116° 6
50	0	109° 9	108° 6	109° 5	117° 5	114° 8	114° 4	115° 6	116° 4	117° 6	116° 6
55	0	109° 5	108° 9	109° 5	114° 5	114° 0	115° 9	115° 9	116° 4	117° 8	116° 5
One Scale Division = '000087 parts of the H. F.											
M.		HORIZONTAL FORCE.									
		Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
2	0	633° 0	638° 8	625° 0	622° 4	617° 0	621° 8	628° 0	625° 0	633° 6	630° 3
7	0	633° 8	640° 8	626° 0	620° 8	617° 2	622° 0	626° 2	624° 5	633° 0	630° 0
12	0	636° 2	642° 9	626° 0	620° 5	618° 0	625° 0	626° 0	623° 5	632° 8	632° 5
17	0	635° 6	642° 0	622° 1	620° 0	614° 8	626° 4	627° 8	626° 0	632° 0	631° 0
22	0	636° 2	638° 2	620° 4	620° 5	613° 0	626° 8	631° 0	635° 2	632° 0	633° 8
27	0	638° 0	637° 0	618° 8	620° 4	612° 8	627° 0	630° 0	637° 0	628° 5	633° 0
32	0	641° 7	633° 0	616° 0	620° 0	615° 4	627° 2	626° 8	633° 5	629° 1	633° 0
37	0	641° 3	631° 4	617° 0	620° 0	617° 0	630° 0	625° 0	635° 4	631° 0	633° 0
42	0	640° 0	629° 7	617° 0	620° 0	618° 8	630° 8	626° 0	634° 8	632° 0	633° 2
47	0	636° 1	629° 1	618° 3	620° 2	621° 0	628° 0	627° 0	635° 0	631° 6	633° 1
52	0	635° 1	624° 3	620° 0	622° 4	621° 4	626° 4	626° 6	633° 8	630° 0	632° 8
57	0	636° 1	621° 0	621° 0	623° 0	621° 2	626° 2	626° 0	634° 8	630° 0	632° 0
Thermometer		51° 6	51° 9	51° 6	51° 1	50° 6	50° 5	50° 5	50° 6	50° 7	51° 5
One Scale Division = '000063 parts of the V. F.											
M.		VERTICAL FORCE.									
		Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
3	0	175° 2	175° 5	174° 7	173° 8	173° 3	173° 1	173° 2	171° 7	166° 9	166° 2
8	0	175° 7	175° 5	174° 7	173° 8	173° 3	173° 1	173° 0	171° 9	166° 9	166° 2
13	0	175° 8	175° 5	175° 5	173° 8	173° 2	173° 1	170° 5	171° 9	166° 9	166° 3
18	0	175° 7	175° 5	175° 5	173° 7	173° 2	173° 0	170° 5	172° 7	166° 9	166° 3
23	0	176° 0	175° 5	175° 2	173° 7	173° 5	173° 0	170° 5	172° 9	166° 9	166° 3
28	0	176° 0	174° 8	175° 2	173° 7	173° 5	173° 2	170° 4	169° 4	166° 9	165° 5
33	0	176° 0	174° 6	174° 5	173° 7	173° 5	173° 2	170° 2	169° 4	166° 9	165° 8
38	0	176° 0	174° 6	174° 5	173° 5	173° 3	172° 5	170° 2	166° 9	166° 9	165° 8
43	0	175° 3	174° 6	174° 5	173° 3	173° 3	172° 3	171° 7	166° 9	166° 2	165° 6
48	0	174° 5	174° 6	174° 5	173° 3	173° 8	172° 3	171° 7	166° 9	166° 2	165° 4
53	0	174° 5	174° 6	174° 5	173° 3	173° 8	172° 3	171° 7	166° 9	166° 2	165° 4
58	0	174° 5	173° 8	174° 5	173° 3	173° 8	172° 3	171° 7	166° 9	166° 2	165° 0
Thermometer		50° 8	51° 3	51° 1	52° 0	51° 6	52° 2	52° 2	51° 9	52° 0	53° 0
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
			Dry.	Wet.	Dry.	Wet.	Direction.	Force.			
D.	H.	M.	In.	°	°	°					
22	10	0	29° 653	37° 1	33° 6		—	—	Clouded; cir.-cum. and cum.-strat.		
	11	0	29° 641	36° 1	32° 5		—	—	Clouded.		
	12	0	29° 619	34° 9	32° 1		—	—	Clouded.		
	13	0	29° 617	33° 8	31° 3		—	—	Clouded.		
	14	0	29° 616	32° 8	31° 1		—	—	Cir.-cum. and cum.-strat.		
	15	0	29° 654	32° 9	30° 3		—	—	Cir.-cum. and cir.-strat.		
	16	0	29° 664	32° 4	30° 1		—	—	Cir.-cum. and cir.-strat.		
	17	0	29° 666	32° 7	30° 5		—	—	Cir.-cum. and cir.-strat.		
	18	0	29° 666	32° 7	30° 3		—	—	Cir.-cum. and cir.-strat.		
	19	0	29° 670	33° 1	30° 4		—	—	Cir.-cum. and cir.-strat.		
	20	0	29° 689	32° 4	30° 5		—	—	Cir.-cum. and cir.-strat.		
	21	0	29° 678	32° 9	30° 5		—	—	Cir. and cir.-cum.		

* At 23° 10', Thermometer of H. F., 53° ° 6; of V. F., 53° ° 0.

MAGNETICAL OBSERVATIONS.

March 22nd and 23rd.

DECLINATION.													Angular Value of one Scale Division = 0°721.					
21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.						
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.						
115°8	117°2	117°4	119°4	122°4	125°5	125°6	121°5	117°0	112°4	106°4	103°6	104°6						
115°9	117°3	118°4	119°6	123°2	123°4	123°4	121°4	116°6	111°6	105°7	103°0	105°2						
116°4	117°3	119°2	120°2	123°1	123°7	123°4	121°5	116°2	110°6	105°6	102°4	105°6						
116°4	117°3	119°0	120°4	123°3	124°4	122°5	121°6	115°8	110°4	105°4	102°2	106°0						
116°4	117°4	118°6	120°4	123°5	126°3	122°4	121°4	115°0	110°0	105°4	102°2	106°4						
116°4	117°6	118°2	120°6	123°8	126°0	123°4	120°8	113°5	109°0	105°0	102°0	106°4						
116°4	117°2	118°4	121°0	123°6	126°6	123°4	120°0	114°0	108°6	105°5	102°2	106°4						
116°4	117°4	118°4	121°8	124°3	126°7	122°8	120°2	114°0	108°2	105°5	102°6	106°8						
116°6	117°7	118°4	121°2	125°3	126°4	123°0	118°5	113°0	107°8	105°0	102°6	107°2						
117°0	118°0	118°8	121°6	125°4	126°4	123°0	118°4	112°9	107°6	104°3	103°2	107°6						
117°2	117°6	118°8	121°8	125°5	124°7	123°4	118°4	112°8	106°6	104°3	101°0	108°2						
117°2	116°4	119°2	122°2	126°1	123°4	122°4	117°7	112°6	106°6	103°7	104°0	108°4						

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

Increase in Volume of Watering				Increase in Temperature								
633°0	633°0	633°0	635°5	631°4	626°8	623°0	613°0	610°0	609°6	612°6	619°0	615°8
632°2	633°0	632°8	634°8	631°2	626°4	623°0	612°0	610°0	609°0	613°0	619°2	617°4
631°5	633°0	631°8	633°4	630°9	628°3	622°0	611°8	610°2	609°0	617°0	624°4	615°8
632°0	633°0	632°0	632°8	631°0	626°2	622°0	611°0	609°5	608°5	616°2	623°2	618°8
631°9	632°2	632°4	633°2	630°6	625°0	622°0	611°5	609°0	608°4	619°9	622°2	621°2
632°0	632°4	633°0	632°5	630°3	623°5	618°0	610°0	608°0	608°7	623°0	619°8	624°4
632°0	632°4	633°4	632°2	630°0	622°3	617°8	610°8	608°5	608°7	625°0	618°2	624°8
632°5	632°0	631°2	632°0	630°1	621°6	618°0	611°5	608°8	609°0	623°0	616°8	624°4
633°0	633°2	631°2	632°2	629°2	620°2	615°6	611°0	607°8	609°6	622°1	617°0	626°8
633°0	631°0	631°0	632°4	628°3	620°0	615°0	610°0	607°5	610°0	619°1	617°2	629°0
633°0	636°0	634°0	632°0	627°4	622°0	615°0	610°5	607°0	611°6	618°0	617°2	631°0
632°8	634°2	631°5	631°8	625°0	622°0	611°0	613°0	609°0	612°0	617°3	616°5	631°2
52°9	53°1	53°5	53°6	52°8	52°0	51°5	52°1	52°7	52°9	53°0	52°5	52°6

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.

165'0	164'9	164'4	165'0	170'3	171'1	172'0	173'0	171'0	169'5	170'6	171'4	168'5
165'0	164'9	164'3	165'4	170'3	171'1	172'0	172'5	171'0	169'5	170'6	171'4	168'5
165'0	164'9	164'4	165'3	169'3	171'1	172'0	172'5	171'0	169'5	170'6	171'7	169'4
165'0	164'9	165'0	165'3	169'3	171'1	173'0	172'5	170'4	169'5	171'4	171'1	169'4
165'4	164'8	165'0	165'6	169'3	171'1	173'0	172'5	170'4	169'5	171'4	170'9	170'3
165'4	164'8	165'0	165'6	169'3	171'1	173'0	172'0	170'4	169'5	171'4	170'9	170'3
165'4	164'8	165'0	167'0	170'3	171'1	173'0	172'0	170'4	169'5	171'4	170'9	170'3
165'4	164'8	165'0	167'0	170'3	171'1	173'0	172'0	169'5	169'6	171'4	170'9	168'2
165'4	164'6	165'0	167'5	170'3	172'3	173'0	171'0	169'5	169'6	171'4	170'3	167'7
165'4	164'6	165'0	168'1	170'3	172'0	173'0	171'0	169'5	169'6	171'4	169'6	168'7
164'9	164'6	165'0	168'4	170'3	172'0	173'0	171'0	169'5	169'6	171'4	169'6	169'3
164'9	164'5	165'0	168'7	170'3	172'0	173'0	171'0	169'5	170'1	171'4	169'6	168'9
51'2	51'2	51'4	51'4	53'4	52'2	51'5	51'8	52'2	52'8	52'8	52'4	52'2

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
22	22	0	29.691	33.4	30.7	—	—	Calm.
	23	0	29.708	33.7	30.6	N. by E.	Very light.	Cir. and cir-cum.
23	0	0	29.734	33.7	30.7	N. by E.	Very light.	Mostly clouded till 7 ^h ; remainder clear.
	1	0	29.756	33.9	30.7	N. by E.	Very light.	Clouded.
	2	0	29.778	34.7	30.7	N. N. E.	Very light.	Clouded.
	3	0	29.782	35.1	31.3	N. by E.	Very light.	Clouded.
	4	0	29.802	37.8	33.1	N. by E.	Very light.	Clouded.
	5	0	29.792	39.4	33.4	N. N. E.	Very light.	Clouded.
	6	0	29.827	40.2	36.1	S. S. W.	Very light.	Clear and unclouded.
	7	0	29.828	41.2	36.9	E.	Light.	Clear and unclouded.
	8	0	29.806	39.5	35.5	S. S. E.	Light.	Clear and unclouded.
	9	0	29.808	40.2	36.1	S. by W.	Very light.	Clear and unclouded.

April 19th and 20th.												MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.											
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.											
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.										
0	0	111°5	113°2	113°8	114°4	115°6	116°3	116°6	117°4	119°0	119°9	118°2	118°2										
5	0	111°4	113°8	113°8	114°5	115°5	115°7	116°7	117°4	119°2	119°6	117°8	117°8										
10	0	111°8	114°2	113°4	114°3	115°6	116°0	117°3	117°4	119°8	119°8	118°2	118°2										
15	0	112°2	114°4	113°4	114°7	116°3	116°4	116°7	117°6	120°2	119°8	118°2	118°2										
20	0	112°4	114°0	113°4	115°3	116°4	116°4	117°0	117°6	120°0	119°2	118°2	118°2										
25	0	112°4	114°4	113°4	115°5	116°4	115°7	117°0	117°6	120°2	119°7	118°4	118°4										
30	0	112°6	115°0	113°2	115°5	115°5	115°6	117°4	117°7	120°0	118°6	118°0	118°0										
35	0	112°8	113°4	113°4	115°7	115°5	115°5	117°4	117°8	119°4	118°4	118°2	118°2										
40	0	113°2	113°4	113°4	115°7	115°5	116°4	117°4	118°0	119°2	118°4	117°9	117°9										
45	0	112°8	114°2	114°2	115°7	115°5	116°4	117°3	118°0	120°6	118°2	118°0	118°0										
50	0	112°8	113°4	114°2	116°2	115°8	116°5	117°3	118°4	119°6	118°4	118°4	118°4										
55	0	113°4	113°4	114°4	115°8	116°0	116°9	117°4	118°4	119°4	118°2	118°5	118°5										
One Scale Division = '000087 parts of the H. F.																							
M.	S.	HORIZONTAL FORCE.																					
2	0	642°4	645°0	640°2	631°9	636°0	636°0	636°1	636°9	637°0	639°0	638°5	638°5										
7	0	643°8	643°2	639°8	632°2	636°0	635°0	636°3	637°0	637°1	638°5	638°5	638°5										
12	0	646°4	642°1	640°0	632°0	636°0	635°0	637°0	637°0	638°0	638°0	638°0	638°0										
17	0	647°1	642°0	639°8	633°0	636°0	636°0	637°0	637°0	639°2	637°8	638°0	638°0										
22	0	649°8	643°0	638°8	633°1	636°0	637°0	636°0	636°0	639°6	638°0	638°0	638°0										
27	0	649°5	642°8	639°2	634°0	636°8	636°2	636°0	635°9	639°6	637°8	638°0	638°0										
32	0	650°0	642°0	638°6	633°4	636°2	636°0	636°0	636°0	639°4	637°8	637°8	637°8										
37	0	650°0	641°8	637°8	634°0	636°0	636°3	636°2	636°0	640°0	638°0	638°0	638°0										
42	0	647°8	641°4	634°4	634°0	636°0	636°1	635°8	636°0	640°6	638°2	638°0	638°0										
47	0	646°8	641°2	635°0	634°1	635°0	636°8	635°6	636°0	641°0	638°3	638°0	638°0										
52	0	645°0	642°2	633°2	635°0	635°0	636°8	635°5	636°4	641°0	638°0	638°0	638°0										
57	0	644°8	641°0	632°8	636°0	636°0	637°2	635°2	636°5	640°2	638°5	640°0	640°0										
Thermometer		51°7	51°9	52°2	52°0	51°5	51°0	50°5	49°9	49°0	48°9	48°3	48°3										
One Scale Division = '000063 parts of the V. F.																							
M.	S.	VERTICAL FORCE.																					
3	0	172°1	172°5	173°5	174°5	170°4	169°2	168°8	169°6	169°8	169°7	171°3	171°3										
8	0	171°8	172°8	173°7	173°9	170°4	169°2	168°8	169°6	169°8	169°7	171°3	171°3										
13	0	171°7	172°8	174°6	173°7	170°4	169°2	168°8	169°6	169°4	169°7	171°3	171°3										
18	0	171°7	173°0	173°8	173°4	170°4	169°2	168°8	169°6	169°4	169°7	171°3	171°3										
23	0	171°7	173°0	173°9	172°8	170°4	169°2	168°8	169°6	169°4	170°5	171°3	171°3										
28	0	171°7	172°9	173°9	172°3	170°4	169°2	168°8	169°6	169°4	170°5	171°3	171°3										
33	0	172°8	173°9	173°8	172°0	170°1	168°6	168°8	169°6	169°4	170°5	171°5	171°5										
38	0	172°8	173°3	173°6	172°0	169°6	168°6	168°8	169°6	169°1	170°6	171°9	171°9										
43	0	171°6	173°3	173°4	172°0	169°6	168°6	168°8	169°8	169°1	170°7	171°9	171°9										
48	0	171°6	173°7	173°2	171°8	169°6	168°6	168°8	169°8	169°1	170°9	171°9	171°9										
53	0	172°3	173°7	173°2	171°0	169°6	168°6	168°8	169°8	169°1	171°3	171°9	171°9										
58	0	172°7	173°0	173°8	171°0	169°6	168°6	168°8	169°8	169°1	171°3	171°9	171°9										
Thermometer		50°2	50°8	51°0	51°2	52°2	52°2	51°7	51°0	50°2	50°0	49°5	49°5										
Increasing Numbers denote decreasing Westerly Declination.																							
METEOROLOGICAL OBSERVATIONS.																							
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.														
					Dry.	Wet.	Direction.	Force.															
D.	H.	M.	In.	°	°		S.S.W.	Very light.	Quite clear all day.														
19	10	0	30°028	38°2	33°0	S.S.W.								Very light.									
	11	0	30°022	39°6	34°2	S.W.								Very light.									
	12	0	30°012	38°6	33°7	—								—									
	13	0	30°011	35°9	31°7	—		—		Calm.													
	14	0	30°011	33°0	29°4	—		—															
	15	0	30°012	34°5	30°4	—		—															
	16	0	30°011	31°2	27°5	—		—															
	17	0	30°005	27°8	26°0	—		—		Calm.													
	18	0	30°004	27°1	25°3	—		—															
	19	0	29°990	25°9	24°7	—		—															
	20	0	29°990	25°0	24°0	—		—															
	21	0	29°986	26°9	24°0	—		—		Calm.													

* At 20° 10', Thermometer of H. F., 54° 0', of V. F., 53° 0'.

MAGNETICAL OBSERVATIONS.

April 19th and 20th.

DECLINATION.

Angular Value of one Scale Division = $0^{\circ}721$.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
118°4	119°0	118°3	121°4	122°6	122°4	122°7	120°4	117°2	113°9	109°6	107°2	108°3
119°9	118°2	118°4	121°4	122°4	123°2	122°4	120°4	116°5	113°2	109°2	107°4	108°2
119°6	117°8	118°5	119°0	121°5	122°4	123°4	122°4	120°0	116°4	112°9	108°6	107°2
119°8	118°2	118°5	119°3	121°6	122°4	123°6	121°7	119°4	116°2	113°7	108°6	107°0
119°2	118°2	118°4	117°6	119°5	121°6	122°4	123°4	121°7	119°1	115°8	112°4	108°2
119°7	118°4	118°4	117°0	120°4	121°6	122°4	123°4	121°8	118°4	114°8	112°2	107°6
118°6	118°0	118°4	116°4	120°6	121°6	122°4	123°4	122°1	117°8	114°4	112°0	107°4
118°4	118°2	118°6	116°4	121°2	121°6	122°4	123°4	121°6	117°6	114°2	111°6	107°4
118°4	117°9	118°4	116°9	121°2	122°4	122°4	123°5	121°5	117°4	113°6	110°6	107°4
118°2	118°0	118°8	117°4	121°4	122°5	122°2	123°4	121°4	117°6	113°4	110°2	107°6
118°0	118°4	118°4	117°6	121°6	122°5	122°2	123°4	121°4	117°4	114°2	110°4	107°4
118°2	118°5	118°6	117°6	121°6	122°6	122°0	123°0	121°0	117°0	114°0	110°2	108°0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}63$.

639°0	637°0	642°0	643°0	641°5	638°2	630°0	623°5	618°0	624°0	622°0	628°0	634°0
639°5	638°0	643°0	643°0	641°2	636°8	628°4	622°2	618°0	623°0	622°6	627°0	636°0
638°0	638°0	642°0	643°7	642°2	636°8	628°0	619°0	620°2	624°0	623°0	630°0	635°0
637°8	638°0	639°0	639°4	643°0	643°5	641°2	636°2	627°1	618°8	620°0	623°2	631°5
638°0	638°0	639°0	639°0	642°5	642°5	641°2	635°0	627°8	620°0	622°0	626°0	631°8
637°8	638°0	638°9	637°5	642°2	643°5	640°8	634°4	627°7	618°5	621°0	625°0	628°1
637°8	637°8	638°5	637°5	642°0	642°0	640°2	633°8	626°0	618°1	620°0	625°0	628°5
638°0	638°0	638°0	638°0	644°0	642°5	640°0	633°2	625°9	619°0	620°0	626°0	630°0
638°2	638°0	638°0	638°0	638°5	642°0	643°0	639°2	632°8	625°0	621°0	626°0	627°7
638°3	638°0	638°0	638°0	639°2	643°0	643°0	639°2	631°4	625°0	623°0	625°0	628°5
638°0	638°0	638°1	641°0	643°2	642°0	639°2	631°2	624°8	618°5	623°4	626°5	627°0
638°5	640°0	638°1	642°0	641°0	642°0	639°2	629°8	623°8	618°0	626°0	625°5	629°0

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}64$.

171°9	171°3	172°5	175°4	173°9	171°3	169°9	170°1	169°0	169°5	169°9	169°5	169°6
171°9	171°9	172°9	175°4	173°8	171°5	169°9	169°5	169°0	169°4	169°9	169°5	169°6
171°9	171°9	172°9	175°4	173°8	171°5	169°9	169°5	169°0	169°4	169°9	169°5	169°6
171°9	171°9	172°9	175°4	173°4	170°6	170°8	169°8	169°0	169°4	169°9	169°5	169°6
171°9	171°9	172°9	175°4	173°4	170°4	170°1	169°8	169°2	169°4	169°7	169°5	169°5
171°4	171°9	172°9	175°4	173°4	170°6	170°1	169°8	169°2	169°4	169°7	168°9	169°5
171°4	172°5	173°3	174°8	173°4	170°6	170°1	169°8	169°2	169°7	169°9	168°9	169°5
171°4	172°5	173°3	174°8	173°4	170°6	170°1	169°8	169°2	169°7	169°9	168°9	170°1
171°3	172°5	173°3	174°8	171°9	170°4	170°1	169°8	169°2	169°7	169°5	168°9	170°1
171°3	172°5	173°5	174°5	171°9	170°6	170°1	169°8	169°2	169°7	169°5	168°9	169°6
171°3	172°5	175°0	174°5	171°9	169°9	170°1	169°8	169°3	170°2	169°5	168°9	169°6
171°3	172°5	175°4	174°5	172°1	169°9	170°1	169°8	169°5	170°2	169°5	169°6	169°6

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
D.	H.	M.		Dry.	Wet.	Direction.	Force.	
19	22	0	29°980	26°3	24°1	—	—	Calm.
	23	0	29°966	25°0	23°6	—	—	Calm.
20	0	0	29°976	27°6	25°4	—	—	Calm.
	1	0	29°974	31°8	28°2	—	—	Calm.
	2	0	29°973	39°1	31°9	—	—	Calm.
	3	0	29°955	11°0	35°1	—	—	Calm.
	4	0	29°935	42°5	36°7	S.	Very light.	Clear all day.
	5	0	29°904	43°8	38°1	S.	Very light.	Clear all day.
	6	0	29°848	46°9	41°5	S. by E.	Very light.	Clear all day.
	7	0	29°812	47°9	40°9	S.S.E.	Very light.	Clear all day.
	8	0	29°776	49°1	43°8	S.S.E.	Very light.	Clear all day.
	9	0	29°730	50°4	44°7	S.	Moderate.	Clear.

May 26th and 27th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.								DECLINATION.			
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	111° 4	113° 4	114° 4	114° 0	112° 4	112° 7	118° 4	114° 2	115° 2	117° 8	122° 3	
5	0	111° 5	113° 4	114° 4	113° 8	112° 4	112° 4	120° 3	114° 2	112° 4	120° 2	125° 5	
10	0	111° 6	113° 4	114° 4	114° 5	112° 4	112° 6	120° 3	114° 2	111° 2	122° 0	128° 7	
15	0	112° 2	113° 4	114° 4	114° 6	112° 4	112° 6	119° 6	114° 4	107° 8	121° 8	130° 6	
20	0	112° 4	113° 5	114° 4	114° 4	112° 4	113° 4	119° 4	114° 4	107° 2	121° 4	129° 4	
25	0	112° 5	113° 5	114° 0	114° 4	112° 4	114° 4	118° 4	114° 4	109° 8	120° 6	133° 5	
30	0	112° 8	113° 4	114° 2	114° 2	112° 4	113° 4	118° 0	113° 4	112° 2	122° 5	130° 3	
35	0	112° 9	113° 4	114° 4	113° 5	112° 6	113° 3	116° 2	114° 5	113° 2	124° 9	127° 5	
40	0	113° 2	113° 5	114° 4	113° 4	112° 2	112° 6	115° 4	114° 4	113° 4	126° 5	127° 1	
45	0	113° 2	113° 6	114° 4	113° 2	112° 4	114° 4	115° 2	112° 0	113° 2	126° 2	125° 4	
50	0	113° 3	113° 6	114° 4	112° 4	113° 4	115° 6	115° 4	111° 4	113° 2	125° 5	126° 1	
55	0	113° 4	114° 3	114° 0	112° 4	112° 4	116° 4	114° 3	112° 6	115° 3	122° 6	127° 6	
One Scale Division = 0° 00087 parts of the H. F.													
M.	S.	HORIZONTAL FORCE.											
2	0	621° 0	619° 0	619° 0	616° 0	617° 2	619° 0	607° 0	613° 2	634° 5	597° 8	585° 0	
7	0	621° 0	620° 0	618° 8	615° 0	619° 0	619° 0	607° 2	614° 0	629° 3	598° 2	587° 0	
12	0	619° 0	620° 5	618° 8	615° 0	619° 5	620° 2	608° 0	615° 0	626° 8	598° 4	585° 0	
17	0	620° 0	620° 5	618° 3	615° 0	619° 0	620° 9	607° 2	614° 8	625° 4	600° 0	580° 0	
22	0	619° 0	619° 5	618° 0	614° 0	617° 5	621° 0	607° 2	617° 6	617° 2	598° 2	582° 6	
27	0	619° 0	618° 5	619° 0	614° 0	616° 0	621° 0	607° 0	619° 0	612° 8	597° 1	577° 0	
32	0	618° 5	618° 8	619° 5	614° 0	616° 0	623° 8	607° 2	619° 2	609° 5	596° 3	578° 8	
37	0	618° 0	619° 0	620° 0	614° 0	618° 0	621° 8	607° 0	620° 4	605° 4	594° 8	582° 1	
42	0	618° 0	618° 4	620° 0	615° 0	619° 8	619° 9	608° 2	629° 7	601° 2	596° 0	590° 0	
47	0	617° 0	619° 0	620° 0	616° 0	623° 0	617° 8	610° 2	632° 2	597° 5	593° 0	594° 0	
52	0	617° 0	618° 0	619° 0	616° 0	622° 0	614° 0	612° 4	632° 0	597° 2	591° 1	599° 2	
57	0	616° 5	619° 0	617° 0	617° 0	620° 0	611° 0	612° 2	632° 4	598° 2	587° 0	602° 6	
Thermometer		70° 4	70° 3	70° 3	69° 0	68° 1	67° 8	67° 2	66° 6	65° 7	65° 2	64° 5	
One Scale Division = 0° 000063 parts of the V. F.													
M.	S.	VERTICAL FORCE.											
3	0	138° 0	138° 2	138° 0	138° 0	135° 3	133° 7	137° 6	139° 3	122° 4	119° 0	117° 1	
8	0	138° 0	138° 2	138° 0	138° 0	135° 3	133° 7	138° 0	139° 3	121° 8	119° 0	116° 8	
13	0	138° 2	138° 2	137° 8	138° 0	135° 3	133° 7	138° 0	139° 6	121° 8	119° 2	117° 8	
18	0	138° 2	138° 2	137° 8	138° 0	134° 3	133° 7	138° 0	139° 6	121° 8	119° 0	119° 5	
23	0	138° 0	138° 0	137° 8	138° 0	134° 3	133° 7	138° 0	139° 1	121° 6	118° 9	120° 6	
28	0	138° 0	138° 0	137° 8	138° 0	134° 0	134° 9	137° 4	138° 7	121° 2	118° 8	118° 4	
33	0	138° 0	138° 0	137° 8	136° 9	134° 0	135° 5	137° 1	136° 5	121° 0	118° 4	119° 8	
38	0	138° 2	138° 0	138° 0	136° 9	134° 0	135° 5	137° 1	131° 9	120° 0	118° 0	123° 3	
43	0	138° 2	138° 0	138° 0	136° 9	134° 0	135° 5	137° 1	131° 4	120° 0	118° 0	127° 4	
48	0	138° 2	138° 0	138° 0	135° 9	134° 0	136° 1	138° 0	130° 8	119° 4	117° 8	129° 6	
53	0	138° 2	138° 0	138° 0	135° 9	134° 0	136° 1	138° 0	129° 4	119° 4	117° 8	133° 0	
58	0	138° 2	138° 0	138° 0	135° 9	133° 5	136° 8	138° 3	129° 1	119° 5	118° 2	134° 3	
Thermometer		67° 3	67° 6	67° 7	67° 5	68° 5	69° 0	68° 5	67° 4	67° 0	66° 1	65° 5	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
26	10	0	29° 660	63° 9	53° 0	N.	Moderate.	Mostly clear; auroral light in N. from 18h to 21h.					
	11	0	29° 674	64° 6	53° 6	N.	Light.	Mostly clear.					
	12	0	29° 678	64° 4	53° 0	N. by E.	Light.	Mostly clear.					
	13	0	29° 694	60° 3	51° 3	N. by W.	Light.	Mostly clear.					
	14	0	29° 706	55° 0	48° 5	N. by W.	Very light.	Mostly clear.					
	15	0	29° 725	53° 4	46° 6	N.N.W.	Very light.	Mostly clear.					
	16	0	29° 737	52° 0	45° 5	N.N.W.	Very light.	Clear.					
	17	0	29° 757	49° 9	44° 6	N. by W.	Very light.	Clear.					
	18	0	29° 767	49° 1	44° 3	N. by W.	Very light.	Clear.					
	19	0	29° 768	48° 7	44° 1	N.N.W.	Very light.	Clear.					
	20	0	29° 782	47° 1	43° 3	N.N.W.	Very light.	Clear.					
	21	0	29° 782	47° 8	43° 2	N. by E.	Very light.	Clear.					

* At 27° 10h, Thermometer of H. F., 68° 5; of V. F., 67° 0.

MAGNETICAL OBSERVATIONS.

May 26th and 27th.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
128°4	121°9	125°8	129°2	129°0	111°6	115°2	109°9	109°2	107°3	105°3	103°2	106°8
129°2	122°8	125°8	130°0	130°2	111°0	115°4	106°4	108°4	107°4	105°4	103°3	106°7
129°5	122°5	126°0	130°4	125°9	114°4	115°4	109°2	109°8	108°8	106°5	103°7	107°2
131°0	121°5	124°0	131°0	129°4	110°4	116°4	111°5	109°6	107°6	105°4	103°4	107°0
131°2	120°6	124°2	130°0	128°5	110°2	111°2	113°5	111°4	108°2	105°2	103°4	107°2
128°4	119°4	124°8	129°4	123°0	114°2	111°5	113°5	111°8	107°2	103°3	105°4	108°0
126°5	120°4	123°4	128°2	117°6	115°4	111°4	111°3	112°2	108°2	102°2	106°1	107°5
127°3	120°4	125°4	128°4	118°2	117°4	113°4	107°0	111°4	107°4	102°2	106°5	108°4
126°3	121°2	126°4	127°7	117°4	117°4	113°4	106°4	109°3	106°0	103°0	107°0	108°7
123°3	123°4	127°4	127°8	117°4	116°6	114°5	107°4	108°4	105°8	103°4	107°9	109°0
125°2	123°6	128°2	127°6	115°6	115°8	115°4	105°2	106°8	103°3	102°4	107°0	101°8
122°6	124°2	129°2	123°5	114°4	115°1	114°2	105°4	106°4	105°3	102°1	106°8	109°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

603°7	616°8	616°0	617°0	608°0	588°5	597°0	588°0	598°5	602°0	616°9	614°0	627°2
603°4	615°6	615°0	616°0	604°0	597°0	595°0	587°2	602°2	598°2	617°0	615°0	630°0
601°0	617°0	615°0	615°0	601°2	600°0	593°0	584°0	604°2	605°8	622°5	616°0	636°0
601°1	612°0	616°0	615°0	600°5	599°5	595°2	588°0	601°6	612°6	622°1	616°5	635°0
604°0	615°0	616°2	611°6	600°5	600°0	598°0	587°2	605°5	612°5	620°8	616°0	635°0
604°2	614°0	616°0	610°0	598°5	597°5	591°0	588°5	602°2	613°1	622°4	624°0	630°0
606°0	614°4	614°0	613°0	590°0	594°0	591°0	590°0	601°2	612°8	613°1	626°0	622°0
609°0	615°0	613°8	610°0	591°0	591°5	596°0	591°6	604°0	610°0	612°0	630°0	628°8
609°0	615°0	620°0	609°0	588°0	593°5	591°0	597°0	598°8	617°2	611°8	626°0	632°0
611°0	618°2	620°0	606°2	585°0	591°5	588°2	603°1	600°2	610°7	609°0	621°0	634°0
615°0	620°4	620°0	606°8	588°5	594°0	585°0	603°2	599°0	618°0	609°0	624°0	636°0
618°0	620°8	618°0	607°0	588°5	594°0	586°0	601°8	601°2	616°0	608°8	625°0	634°0
63°9	63°2	63°0	62°2	62°8	63°5	61°2	65°1	65°8	66°1	66°5	67°0	68°0*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

133°5	143°7	143°1	142°8	140°2	137°1	138°0	143°1	143°0	142°7	147°2	149°5	148°2
132°4	143°4	143°1	142°8	140°2	137°1	138°3	142°1	141°7	142°2	147°2	149°2	148°2
132°4	143°4	143°2	142°8	140°2	137°1	138°3	140°1	141°7	143°1	148°5	149°2	148°2
133°7	143°4	145°5	142°8	140°2	137°1	139°3	139°1	141°7	143°7	148°5	149°2	148°2
134°7	143°4	145°5	142°8	140°2	137°1	140°0	140°2	142°3	144°6	149°3	149°7	148°4
136°2	143°4	145°7	142°8	139°2	136°8	139°3	140°4	142°3	145°2	149°3	149°9	147°3
137°6	143°4	145°7	142°8	136°4	136°8	139°5	140°9	141°5	145°2	148°7	149°9	147°1
138°2	143°6	145°7	143°5	136°4	136°8	139°3	140°9	141°4	145°2	148°7	149°9	147°1
139°0	143°6	145°9	143°5	136°5	136°8	139°3	140°9	140°9	146°0	148°8	149°9	146°9
140°8	143°1	145°9	143°5	136°5	136°8	138°8	141°4	141°6	146°0	148°8	148°2	146°9
141°5	143°1	145°9	143°5	137°1	136°8	138°3	141°4	142°2	146°0	148°8	148°2	146°9
143°0	143°1	145°8	143°5	137°1	138°0	139°9	141°2	142°2	146°0	148°4	148°2	146°9
64°6	64°0	63°5	63°5	63°5	63°6	61°4	61°5	61°9	65°3	65°5	65°5	66°5*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.		Thermom. ters.		Wind.		Weather.
D.	H.	M.	In.	o.	Dry.	Wet.	Direction.	Force.	
26	22	0	29°795	47°0	42°8	—	N. by E.	Very light.	Clear.
26	23	0	29°792	47°0	42°9	—	N.	Very light.	Clear.
27	0	0	29°829	50°8	47°1	—	—	—	Calm.
1	0	0	29°850	52°8	48°7	—	—	—	Calm.
2	0	0	29°850	58°2	52°8	—	—	—	Calm.
3	0	0	29°857	61°5	55°4	—	—	—	Calm.
4	0	0	29°831	62°3	55°8	—	—	—	Calm.
5	0	0	29°822	62°4	56°5	—	S.S.E.	Very light.	Clear.
6	0	0	29°822	62°2	56°3	—	S. by W.	Very light.	Clear.
7	0	0	29°795	64°9	57°6	—	S. by E.	Very light.	Clear.
8	0	0	29°773	66°3	58°0	—	S. by E.	Very light.	Clear.
9	0	0	29°737	66°0	56°2	—	E. by S.	Very light.	Clear.

June 21st and 22nd.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.						DECLINATION.				
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	110° 2	109° 2	113° 4	113° 2	111° 4	116° 0	116° 0	117° 4	121° 4	122° 4	123° 5
5 0	112° 2	112° 6	113° 4	113° 4	111° 8	115° 5	119° 4	117° 6	122° 4	121° 6	124° 6
10 0	117° 4	112° 5	111° 0	113° 6	110° 4	116° 0	121° 6	118° 4	124° 9	123° 0	124° 4
15 0	117° 4	112° 4	113° 8	115° 4	112° 4	116° 7	121° 4	118° 6	126° 5	123° 4	119° 9
20 0	115° 5	113° 5	114° 4	115° 7	113° 2	117° 0	120° 2	117° 6	124° 0	126° 4	119° 3
25 0	114° 4	113° 5	114° 0	116° 0	113° 5	114° 2	119° 3	117° 0	118° 6	127° 4	118° 4
30 0	113° 2	113° 2	114° 0	116° 0	112° 6	114° 4	117° 6	118° 4	118° 4	139° 9	118° 2
35 0	113° 0	113° 4	114° 4	112° 4	112° 4	116° 0	117° 4	119° 4	121° 4	130° 4	119° 5
40 0	110° 8	113° 6	115° 0	111° 5	112° 4	117° 8	116° 6	119° 6	125° 5	134° 0	118° 8
45 0	109° 4	113° 4	115° 4	111° 4	112° 6	118° 4	117° 4	118° 4	127° 0	135° 2	119° 4
50 0	109° 4	113° 4	115° 0	112° 4	113° 3	118° 0	117° 0	118° 5	126° 4	134° 2	119° 2
55 0	109° 4	113° 6	113° 8	112° 0	115° 4	116° 7	117° 4	119° 2	122° 2	131° 7	120° 1
One Scale Division = 0° 00087 parts of the H. F.											
HORIZONTAL FORCE.											
M. S.	625° 4	624° 2	601° 2	613° 0	607° 0	602° 2	602° 0	599° 4	602° 0	604° 2	609° 9
2 0	614° 4	623° 2	600° 2	617° 0	612° 0	603° 2	602° 0	601° 0	601° 5	607° 5	603° 0
7 0	619° 3	614° 2	599° 0	616° 0	610° 0	604° 0	600° 0	601° 0	603° 5	608° 0	600° 0
12 0	616° 2	599° 2	597° 0	618° 0	609° 2	607° 0	600° 0	600° 5	602° 0	606° 0	596° 0
17 0	607° 2	598° 0	605° 0	618° 2	610° 0	607° 4	599° 0	599° 0	602° 8	600° 0	594° 0
22 0	603° 0	597° 0	610° 5	611° 5	610° 2	609° 0	599° 0	599° 0	604° 0	605° 5	590° 0
27 0	600° 2	593° 2	614° 0	613° 0	610° 2	608° 8	600° 0	599° 0	602° 0	608° 7	592° 0
32 0	600° 0	596° 4	616° 0	618° 2	606° 0	605° 0	599° 0	600° 0	602° 0	602° 0	597° 1
37 0	602° 8	597° 4	615° 0	611° 8	605° 8	603° 2	599° 0	601° 2	600° 5	600° 0	599° 5
42 0	608° 5	595° 0	618° 2	613° 0	606° 4	607° 0	599° 0	601° 0	601° 0	599° 0	601° 0
47 0	614° 0	601° 2	621° 2	611° 0	602° 0	607° 2	599° 0	603° 0	599° 0	601° 0	601° 0
52 0	621° 2	602° 2	613° 4	611° 0	602° 0	604° 4	601° 0	600° 5	603° 0	604° 0	602° 0
57 0											
Thermometer											
	71° 8	72° 4	72° 6	72° 2	71° 5	71° 3	70° 4	69° 6	69° 5	69° 8	68° 6
One Scale Division = 0° 00063 parts of the V. F.											
VERTICAL FORCE.											
M. S.	138° 1	137° 2	130° 7	132° 1	133° 2	131° 5	127° 4	127° 9	119° 8	124° 0	123° 6
3 0	138° 1	135° 9	130° 7	132° 7	133° 7	131° 5	127° 7	127° 9	119° 8	124° 0	124° 0
8 0	138° 1	133° 4	129° 4	132° 7	133° 7	131° 5	127° 8	127° 9	119° 8	124° 0	124° 2
13 0	137° 1	133° 4	129° 4	132° 7	133° 7	131° 5	127° 8	127° 9	119° 8	122° 7	124° 2
18 0	135° 1	133° 4	129° 0	132° 7	133° 7	131° 1	128° 6	127° 7	119° 8	122° 7	122° 6
23 0	133° 9	133° 5	132° 1	132° 7	133° 7	131° 1	128° 6	127° 9	123° 0	121° 5	120° 5
28 0	133° 9	133° 1	132° 1	132° 7	133° 7	131° 1	128° 9	127° 9	123° 3	119° 6	121° 2
33 0	133° 6	133° 1	132° 1	133° 0	133° 2	131° 3	128° 9	127° 9	125° 0	119° 6	121° 3
38 0	133° 2	133° 1	132° 1	133° 0	133° 2	131° 3	129° 6	127° 8	125° 0	119° 0	121° 3
43 0	133° 8	133° 1	132° 7	133° 0	132° 9	131° 3	129° 6	127° 8	125° 0	118° 5	121° 2
48 0	133° 8	133° 1	132° 7	133° 0	132° 9	131° 4	129° 6	127° 8	125° 0	119° 0	119° 0
53 0	136° 3	133° 1	131° 7	133° 2	132° 9	131° 4	129° 6	127° 8	124° 0	121° 5	118° 2
58 0											
Thermometer											
	70° 6	71° 3	71° 3	71° 3	70° 5	70° 8	70° 8	70° 5	70° 5	70° 5	70° 0
Increasing Numbers denote decreasing Westerly Declination.											
METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.		
D.	H.	M.	In.	°	Dry.	Wet.	Direction.	Force.			
21	10	0	29° 400	71° 5	61° 4	W.N.W.	Very light.	Mostly clouded; cir.-cum. and cum.-strat.; a few clear spaces.			
	11	0	29° 401	70° 6	61° 1	W.N.W.	Very light.	Mostly clouded; a few clear spaces.			
	12	0	29° 423	69° 8	58° 9	W.N.W.	Light.	Mostly clouded; a few clear spaces.			
	13	0	29° 457	67° 3	58° 2	W.N.W.	Light.	Clouded.			
	14	0	29° 460	63° 1	55° 6	W.N.W.	Very light.	Clouded.			
	15	0	29° 470	62° 5	55° 0	—	—	Clouded.			
	16	0	29° 463	57° 3	53° 6	—	—	Clouded.			
	17	0	29° 442	55° 2	52° 5	—	—	Clouded.			
	18	0	29° 449	52° 8	50° 8	—	—	Clouded.			
	19	0	29° 445	53° 2	50° 8	—	—	Clouded.			
	20	0	29° 475	53° 4	51° 0	—	—	Clouded.			
	21	0	29° 482	52° 6	50° 8	—	—	Clouded.			

* At 22° 10°, Thermometer of H. F., 72° 3; of V. F., 71° 0.

MAGNETICAL OBSERVATIONS.

June 21st and 22nd.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
121°3	108°8	127°4	117°4	126°1	126°1	125°0	123°0	112°6	111°9	106°2	106°4	111°5
124°0	114°4	135°0	121°8	124°4	127°6	124°7	122°6	115°6	115°2	106°4	107°0	112°6
125°4	118°4	133°4	118°8	124°9	127°4	124°0	121°4	116°6	115°6	106°7	107°4	114°6
127°4	122°4	131°4	123°0	124°8	128°4	124°6	119°3	117°4	114°4	106°5	107°4	114°6
126°6	126°4	122°4	122°2	123°4	126°4	121°4	114°4	117°8	112°4	106°5	107°4	115°6
125°4	126°6	120°4	125°0	123°4	123°4	117°2	115°0	117°5	107°4	107°6	107°7	117°4
122°4	125°4	118°8	128°4	127°0	124°7	116°3	112°6	118°2	104°8	107°6	108°4	118°4
117°3	125°5	118°2	126°4	125°6	121°4	115°9	114°8	120°0	104°5	107°3	108°9	118°4
109°8	122°4	116°4	125°0	124°0	122°4	118°5	114°3	119°4	105°4	106°4	109°5	118°4
104°5	120°0	116°0	124°8	122°0	121°4	120°8	113°4	119°0	105°2	106°4	110°3	115°5
102°3	120°0	116°4	124°6	124°6	120°0	122°2	112°2	117°4	104°6	105°8	110°5	115°4
103°3	121°8	118°8	126°4	123°0	123°4	123°6	111°6	116°6	105°4	106°4	111°3	116°5

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

600°9	609°0	603°2	605°5	588°8	604°5	598°0	580°0	585°0	587°0	602°1	604°0	643°0
595°0	610°0	608°7	608°4	585°0	601°0	598°8	579°0	584°5	586°0	606°5	611°0	640°0
590°0	614°0	602°2	604°5	588°0	598°0	590°0	579°5	579°0	580°0	605°1	616°0	645°0
588°9	615°4	596°4	599°2	589°0	598°8	597°0	577°5	580°0	571°0	607°2	623°0	645°0
585°0	609°0	598°0	598°8	592°8	597°0	594°2	586°0	583°0	570°0	611°1	626°0	642°0
587°5	606°0	597°5	594°3	592°2	596°8	594°5	582°0	584°0	575°0	606°0	628°1	652°0
590°0	599°8	596°0	594°0	590°0	604°2	594°0	574°0	584°0	565°0	607°0	630°6	650°0
590°0	591°4	593°8	592°8	596°8	605°4	595°2	581°0	579°0	569°0	603°0	632°0	652°1
591°0	593°5	598°8	591°0	602°0	602°0	593°0	585°0	571°0	574°0	601°0	635°0	660°0
599°0	595°0	601°2	588°7	605°0	604°2	587°0	585°0	571°0	581°5	610°0	638°0	661°2
609°0	599°5	603°0	588°8	608°5	601°0	585°0	583°0	571°0	588°0	603°0	638°1	660°0
612°2	603°4	603°2	589°0	610°0	603°0	583°0	583°5	577°5	594°0	601°0	641°1	655°0

68°5	68°0	67°8	67°4	67°0	67°5	68°5	69°4	70°0	70°5	71°4	71°7	72°2
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

114°8	105°4	111°7	128°4	131°8	136°7	134°5	131°5	132°6	136°0	139°2	141°2	146°1
112°8	105°4	116°0	129°2	133°3	136°7	134°5	131°5	132°6	136°0	139°2	141°2	146°9
112°8	105°4	116°4	129°2	133°3	136°5	134°5	133°0	132°9	136°0	139°2	140°8	148°8
111°8	107°0	118°3	128°9	133°3	136°5	134°5	133°0	132°9	136°0	139°2	142°4	148°8
111°8	106°1	118°9	130°7	135°1	136°5	132°2	133°5	132°9	136°8	140°5	142°4	150°2
113°6	106°1	118°9	128°4	135°1	136°5	134°8	133°5	133°2	137°3	140°5	142°4	151°5
113°6	109°0	120°0	128°4	135°1	136°7	133°6	132°5	133°2	137°3	140°5	142°4	151°0
112°6	108°5	121°0	131°9	134°8	136°7	133°0	132°5	133°2	137°3	140°5	142°4	150°6
112°0	108°5	122°9	132°0	134°8	136°7	132°9	132°5	133°2	137°3	140°5	143°8	150°9
111°0	109°0	123°7	131°9	136°6	136°1	132°0	132°5	133°2	137°3	140°8	143°8	150°9
108°9	110°0	124°0	131°9	136°6	136°1	132°0	132°5	134°1	137°3	140°8	145°0	150°9
108°9	111°0	124°0	132°7	138°5	136°1	131°5	132°6	136°0	138°5	141°2	145°0	150°9

69°5	68°4	68°3	67°3	67°3	67°7	68°5	68°8	69°3	69°5	70°1	70°4	70°8
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	L.					
21 22 0	29°496	52°6	51°0	—	—	Clouded.
23 0 0	29°489	53°7	52°1	—	—	Clouded.
22 0 0	29°498	57°2	54°8	—	—	Mostly clouded; cum.-strat. and cir.-strat.; faint auroral light.
1 0 0	29°498	59°7	56°4	—	—	Mostly clouded; cum.-strat. and cir.-strat.
2 0 0	29°510	67°3	62°2	—	—	Mostly clouded; cum.-strat. and cir.-strat.
3 0 0	29°496	68°9	64°0	S.S.E.	Very light.	Mostly clouded.
4 0 0	29°505	66°5	62°7	S.S.E.	Very light.	Mostly clouded.
5 0 0	29°495	67°7	62°9	S.E. by E.	Very light.	Mostly clouded.
6 0 0	29°492	69°1	63°7	E. by S.	Very light.	Clouded.
7 0 0	29°493	71°5	64°9	E.	Very light.	Clouded.
8 0 0	29°486	69°9	63°6	E.	Very light.	Clouded.
9 0 0	29°474	70°1	63°4	E.	Very light.	Clouded.

MAGNETICAL OBSERVATIONS.

July 19th and 20th.

DECLINATION.

Angular Value of one Scale Division = 0''.721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
114.4	112.4	119.2	120.0	120.8	123.4	120.2	117.9	112.0	107.4	105.4	106.4	108.2
114.6	112.4	119.2	120.0	121.8	124.0	120.0	117.0	111.5	107.2	105.4	106.7	108.4
114.4	112.4	119.2	120.2	122.8	123.2	118.6	117.3	110.8	107.0	105.4	107.3	108.4
114.4	113.3	119.4	120.2	122.4	122.4	118.8	117.2	110.4	105.4	105.6	107.4	108.8
114.5	113.4	119.4	120.4	122.4	122.4	118.4	116.2	110.3	105.0	105.3	107.4	108.6
114.3	113.4	119.5	120.4	121.5	121.6	118.6	114.8	109.4	105.6	105.4	107.3	109.3
114.3	113.2	119.8	120.6	122.4	121.6	118.9	114.4	109.3	106.4	105.6	107.4	108.8
114.3	113.2	119.8	120.2	122.4	121.6	118.8	114.2	109.2	106.2	105.7	107.4	109.0
114.8	112.7	120.0	119.8	122.4	121.6	117.8	114.2	108.8	105.8	105.7	107.5	109.2
115.4	112.7	120.2	119.8	122.0	121.4	118.4	113.6	108.4	105.4	105.8	107.5	109.3
115.2	112.5	120.4	119.8	122.4	120.9	117.4	113.6	107.4	105.2	105.9	107.6	109.4
115.4	112.5	120.4	120.0	123.2	120.4	117.4	112.4	107.6	105.3	106.4	107.8	109.4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

599.0	601.0	602.2	592.8	591.2	592.0	588.8	588.2	580.0	583.8	593.0	596.0	601.0
599.5	602.0	601.4	593.6	590.2	588.4	589.0	586.0	578.5	581.8	591.0	595.0	601.0
599.8	601.2	601.5	593.8	590.0	588.0	588.7	585.0	578.6	583.0	591.0	597.0	600.0
599.0	601.4	600.8	591.2	591.0	588.2	588.5	585.0	578.5	582.2	592.5	598.0	598.2
598.5	602.3	597.6	591.6	590.0	591.0	589.0	584.0	578.4	588.0	592.8	598.0	597.0
599.2	602.0	598.8	593.0	589.0	591.0	590.2	583.2	579.0	586.0	592.5	598.1	597.8
599.8	601.9	600.0	591.2	589.8	591.0	590.0	583.4	581.0	589.0	592.0	599.0	597.2
600.0	602.0	600.2	592.2	590.0	589.0	590.4	581.0	581.2	589.0	593.5	600.0	597.4
600.0	601.2	599.7	592.0	590.2	588.0	590.0	579.1	583.0	588.6	591.0	599.0	598.2
600.6	600.8	599.8	592.4	590.0	588.2	588.0	579.2	583.8	590.7	591.2	599.0	599.0
601.0	601.0	597.8	592.3	592.0	587.0	587.0	580.5	581.5	591.8	595.0	600.0	599.0
600.0	601.2	592.6	591.2	593.0	589.0	588.0	579.5	582.0	593.7	596.0	600.0	599.0

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

123.1	123.9	123.9	125.0	125.1	124.2	124.2	124.1	121.6	119.7	117.9	117.5	118.8
120.8	121.7	125.0	124.8	124.8	124.2	124.2	123.6	121.6	119.7	117.9	117.5	118.8
120.4	121.7	126.2	124.8	124.8	124.2	124.2	123.6	121.4	119.7	117.9	117.8	118.8
120.4	121.7	126.4	126.1	124.8	124.2	124.2	123.6	121.4	119.7	116.4	117.8	118.8
120.4	121.7	126.4	126.1	124.8	124.2	124.2	123.6	121.0	119.7	116.4	117.6	118.8
121.5	122.8	126.7	126.1	124.8	124.2	124.2	123.6	120.8	119.0	117.6	117.6	118.8
121.5	122.8	126.7	125.7	124.8	124.2	124.2	123.6	120.6	119.0	117.6	118.1	118.3
121.5	122.8	126.8	125.7	125.0	123.8	124.2	123.4	120.6	119.0	116.8	118.1	118.3
121.5	122.8	126.8	125.7	125.0	123.8	124.6	122.6	120.6	119.0	116.6	118.1	118.3
121.7	122.8	126.8	125.7	124.8	123.8	124.6	122.6	120.6	118.7	116.8	118.1	118.3
121.7	122.8	126.1	125.5	125.0	123.8	124.0	122.6	120.4	118.7	116.6	118.1	118.2
121.7	122.4	126.1	125.1	124.8	123.8	124.1	122.6	119.7	117.9	116.2	118.8	118.2

and increasing Horizontal and Vertical Force.

ing Westerly Declination,

August 25th and 26th.											
MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time,	Angular Value of one Scale Division = $0^{\circ} 721$.						DECLINATION.				
	10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	111'4	116'4	116'4	114'6	113'6	113'7	113'2	115'2	113'2	113'4	108'2
5 0	111'4	116'4	116'4	114'3	113'6	113'6	113'4	114'6	113'4	111'6	110'2
10 0	111'8	116'8	116'4	114'2	114'0	113'6	113'4	116'4	113'2	110'4	112'6
15 0	111'4	117'0	116'2	113'8	113'9	113'6	113'4	116'2	113'4	110'9	113'8
20 0	113'0	116'8	116'2	113'9	114'0	113'7	113'3	115'4	113'4	106'6	114'4
25 0	113'4	116'4	115'4	114'8	113'8	113'7	113'3	115'4	113'4	107'8	—
30 0	114'2	116'4	115'4	114'4	113'6	113'7	114'1	114'4	113'4	106'6	115'4
35 0	114'6	116'8	115'0	114'6	113'6	113'8	113'5	114'3	112'4	106'4	115'0
40 0	115 0	116'8	114'8	114'4	113'6	113'4	113'4	114'3	111'7	106'8	114'4
45 0	115'4	116'8	114'8	114'6	113'7	113'4	113'4	114'3	112'3	107'2	114'4
50 0	115'7	117'0	115'0	114'0	113'6	113'2	114'5	113'4	113'1	107'6	115'0
55 0	115'9	116'8	114'7	115'0	113'6	113'2	114'5	113'4	113'4	107'8	115'0
One Scale Division = $0^{\circ} 000087$ parts of the H. F.											
HORIZONTAL FORCE.											
M. S.											
2 0	601'5	593'0	604'0	600'0	603'2	606'0	608'0	607'0	606'5	606'0	606'0
7 0	598'5	593'0	602'0	600'0	603'9	606'0	608'0	608'1	607'0	606'9	605'8
12 0	597'8	597'0	602'2	600'0	604'0	607'0	608'0	609'9	606'9	607'9	605'2
17 0	598'0	599'8	600'0	600'0	605'5	608'0	607'0	609'0	607'0	607'9	605'0
22 0	596'0	602'0	600'2	601'2	605'8	608'0	607'0	609'0	607'0	607'8	606'2
27 0	595'0	603'2	600'0	602'0	605'8	608'0	607'0	608'2	606'1	608'2	—
32 0	595'2	603'4	601'0	603'0	605'5	607'0	607'1	607'1	606'3	607'8	606'0
37 0	596'0	603'2	600'0	603'0	605'5	607'0	606'9	606'5	606'9	608'0	605'0
42 0	596'2	604'0	600'0	605'0	605'8	608'0	604'1	606'0	606'0	607'2	604'8
47 0	595'0	604'2	599'0	604'0	606'2	607'0	607'0	606'5	605'2	607'8	603'0
52 0	593'8	604'4	600'0	603'0	606'2	608'0	607'0	607'0	605'0	607'6	604'8
57 0	594'0	604'0	600'0	603'0	606'2	608'5	606'3	606'2	605'1	607'4	605'0
Thermometer	76'2	75'4	75'2	75'0	75'1	75'1	75'0	74'6	74'5	74'3	74'1
One Scale Division = $0^{\circ} 000063$ parts of the V. F.											
VERTICAL FORCE.											
M. S.											
3 0	116'5	118'3	118'6	117'2	115'9	114'0	114'5	115'3	114'7	115'5	116'0
8 0	116'5	118'3	118'6	117'0	115'9	114'0	114'5	115'3	114'7	115'5	116'0
13 0	116'5	118'3	118'8	117'0	114'9	114'0	114'5	115'3	115'1	115'5	116'0
18 0	116'5	118'5	118'8	116'0	114'6	114'0	114'5	115'0	115'1	115'5	116'0
23 0	116'2	118'5	118'8	116'0	114'6	114'0	114'5	114'7	115'1	115'5	116'2
28 0	116'2	118'5	118'8	116'0	114'0	114'0	115'3	114'7	115'1	115'5	—
33 0	116'2	118'5	118'8	116'0	114'4	114'0	115'3	114'7	115'1	115'5	116'2
38 0	116'2	118'6	118'8	116'0	114'4	114'0	115'3	114'7	115'5	116'0	116'2
43 0	116'2	118'6	118'8	116'0	114'4	114'0	115'3	114'7	115'5	116'0	116'2
48 0	113'9	118'6	118'9	116'0	114'0	114'0	115'3	114'7	115'5	116'0	116'2
53 0	113'9	118'6	117'9	116'0	114'0	114'0	115'3	114'7	115'5	116'0	116'2
58 0	113'7	118'6	117'9	115'5	114'0	114'0	115'3	114'7	115'5	115'7	116'7
Thermometer	74'0	74'2	74'2	74'0	74'2	74'0	75'0	75'0	74'5	74'5	74'3

Increasing Numbers denote decreasing Westerly Declination.

MAGNETICAL OBSERVATIONS.

August 25th and 26th.

DECLINATION.

Angular Value of one Scale Division = 0'' 721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
113° 4	113° 2	113° 0	112° 6	112° 3	112° 0	111° 5	108° 4	101° 7	104° 2	106° 0	110° 0	110° 0
115° 8	115° 4	119° 6	122° 8	129° 4	127° 0	121° 0	114° 0	108° 2	105° 2	104° 0	106° 4	110° 2
115° 0	114° 8	119° 8	123° 8	128° 6	126° 6	120° 6	113° 4	108° 3	104° 6	104° 0	106° 4	110° 4
114° 4	113° 4	120° 4	124° 0	128° 0	126° 0	120° 4	112° 4	108° 2	104° 6	104° 2	106° 8	111° 0
115° 0	117° 6	121° 4	125° 0	127° 4	125° 6	119° 4	112° 4	107° 4	104° 6	104° 8	107° 4	111° 2
114° 2	117° 8	121° 6	126° 6	127° 6	125° 0	118° 6	111° 6	106° 8	104° 6	104° 6	107° 4	111° 8
114° 0	117° 0	120° 8	127° 0	128° 0	124° 6	118° 2	111° 3	106° 4	105° 0	104° 8	108° 2	111° 8
113° 8	117° 4	121° 2	127° 4	128° 4	124° 2	117° 7	110° 4	106° 6	105° 0	104° 8	108° 4	112° 0
114° 2	117° 4	122° 2	127° 4	128° 3	123° 6	117° 0	110° 2	105° 4	105° 0	105° 0	108° 4	112° 4
114° 0	117° 6	122° 4	129° 2	128° 2	123° 6	116° 4	109° 6	105° 0	104° 8	105° 0	108° 8	112° 6
114° 4	118° 0	122° 3	128° 8	127° 6	121° 8	116° 0	109° 6	105° 0	104° 4	105° 4	109° 0	113° 0
114° 4	118° 0	122° 4	129° 3	127° 6	122° 0	115° 4	109° 2	104° 6	104° 6	105° 6	109° 4	113° 2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

606° 5	604° 8	606° 0	602° 0	598° 0	589° 0	582° 1	579° 0	576° 0	581° 2	590° 2	600° 0	604° 0
606° 2	605° 0	606° 4	602° 2	597° 0	589° 0	582° 1	579° 0	577° 0	581° 4	591° 0	600° 0	604° 4
605° 8	604° 2	607° 0	602° 0	598° 0	588° 0	582° 2	578° 5	574° 0	582° 2	591° 3	600° 8	605° 0
605° 0	605° 0	601° 0	602° 0	596° 0	588° 0	582° 0	578° 0	574° 2	583° 4	591° 8	601° 2	605° 2
604° 8	605° 0	601° 8	601° 2	594° 5	587° 1	582° 0	577° 5	579° 0	581° 0	592° 8	602° 0	605° 2
604° 2	605° 0	601° 8	600° 0	594° 5	586° 5	582° 0	577° 5	580° 0	585° 0	593° 2	602° 2	608° 8
603° 8	605° 2	605° 0	600° 0	595° 2	586° 0	581° 0	577° 0	581° 0	586° 0	594° 2	602° 8	609° 2
604° 0	605° 0	602° 2	600° 4	593° 5	585° 0	581° 0	577° 0	581° 0	587° 0	594° 5	601° 8	608° 0
603° 8	606° 0	602° 2	600° 2	591° 8	584° 0	580° 0	578° 0	581° 0	587° 8	597° 0	601° 2	608° 4
603° 5	604° 4	602° 2	598° 6	591° 0	584° 4	580° 0	577° 0	581° 0	588° 2	597° 8	601° 5	608° 2
603° 0	606° 0	602° 0	598° 0	591° 2	583° 1	580° 0	576° 0	581° 5	588° 0	599° 0	602° 2	609° 4
603° 0	606° 0	601° 8	597° 0	591° 2	583° 0	579° 0	576° 5	581° 5	588° 8	598° 0	603° 2	608° 2

73° 6	75° 5	72° 7	72° 8	73° 0	73° 1	73° 8	74° 8	75° 3	75° 4	75° 4	75° 5	75° 3
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

116° 7	118° 0	117° 7	117° 9	118° 0	117° 7	117° 3	116° 8	114° 0	114° 0	115° 0	116° 6	116° 5
117° 0	118° 0	117° 7	117° 9	118° 0	117° 7	117° 3	116° 7	114° 0	114° 0	115° 0	116° 6	116° 5
117° 1	117° 5	117° 7	117° 9	118° 0	117° 5	117° 3	116° 2	114° 0	114° 0	115° 1	116° 6	116° 4
117° 1	117° 5	117° 7	117° 9	118° 0	117° 5	117° 3	116° 0	114° 0	114° 0	116° 0	116° 6	116° 4
117° 1	117° 5	117° 7	117° 9	117° 7	117° 5	117° 3	116° 0	114° 2	114° 0	116° 0	116° 6	116° 4
117° 5	117° 5	117° 7	117° 9	117° 7	117° 5	117° 3	116° 0	114° 2	114° 0	116° 0	116° 6	116° 6
117° 5	117° 7	117° 7	117° 9	117° 6	117° 4	117° 3	115° 2	114° 2	114° 0	116° 3	116° 5	117° 0
117° 5	117° 7	117° 7	117° 9	117° 6	117° 4	117° 3	115° 2	114° 2	114° 0	116° 3	115° 8	117° 0
117° 5	117° 7	117° 7	117° 9	117° 6	117° 4	117° 3	115° 0	114° 2	114° 3	116° 6	115° 8	116° 6
117° 8	117° 7	117° 7	117° 9	117° 6	117° 4	116° 8	115° 0	114° 2	115° 0	116° 7	115° 8	116° 6
118° 0	117° 7	117° 7	118° 0	117° 6	117° 3	116° 8	115° 0	114° 2	115° 0	116° 7	115° 8	117° 0
118° 0	117° 7	117° 9	118° 0	117° 6	117° 3	116° 8	115° 0	114° 2	115° 0	116° 7	116° 0	117° 0

74° 8	75° 5	73° 3	73° 1	73° 0	72° 8	73° 0	73° 7	74° 5	74° 0	74° 5	74° 0	74° 0
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and increasing Horizontal and Vertical Force.

Using Westerly Declination.

DECLINATION.			MAGNETICAL OBSERVATIONS.												September 20th and 21st.	
18°.	19°.	20°.	DECLINATION.												Angular Value of one Scale Division = 0°721.	
21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.	13h.
Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
114°6	114°4	114°6	114°4	113°0	116°7	120°4	122°6	122°8	120°0	116°6	113°8	109°3	107°6	109°0	110°9	
114°5	114°4	114°4	113°4	113°0	116°5	120°4	122°2	122°4	119°1	116°4	113°4	109°0	107°7	109°0	111°0	
114°4	113°6	114°6	112°4	113°8	116°9	120°6	122°0	122°2	119°4	116°4	112°5	108°9	107°8	109°2	111°2	
114°4	114°6	114°6	113°0	115°4	117°4	121°4	122°2	122°8	119°4	116°0	111°9	108°8	107°8	109°2	111°6	
114°4	115°0	114°4	112°4	115°4	117°7	121°4	122°6	123°0	119°3	115°6	111°4	108°4	107°8	109°6	112°0	
114°5	114°6	114°8	110°6	115°8	118°2	121°4	122°4	124°0	119°4	115°0	110°5	108°3	108°0	110°0	112°6	
114°4	114°4	114°6	110°0	116°0	118°4	121°5	123°2	123°5	119°4	115°2	110°4	108°1	108°0	109°5	112°4	
114°8	114°4	114°7	109°0	116°5	119°3	121°6	124°0	123°0	119°4	115°4	110°4	108°2	108°4	110°0	112°4	
114°6	114°4	115°2	108°9	116°4	120°1	121°2	124°8	122°8	119°1	115°0	110°8	107°8	108°6	110°4	112°4	
114°4	114°5	114°4	109°4	115°9	120°4	121°7	123°4	122°4	118°9	114°5	110°4	108°0	108°6	110°4	112°6	
114°2	114°6	114°6	110°4	116°4	120°4	122°1	123°6	120°4	118°4	114°0	109°7	108°0	108°8	110°6	112°6	
			111°6	116°6	120°4	123°1	123°4	120°2	117°6	114°0	109°5	107°7	108°8	111°0	112°8	
HORIZONTAL FORCE.			HORIZONTAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.	
623°0	623°2	624°0	624°0	626°7	629°2	625°0	619°0	611°8	601°2	595°7	597°0	602°2	609°0	621°0	628°0	
622°8	624°2	623°9	623°5	626°7	628°0	630°0	618°7	610°4	600°4	595°4	597°5	602°8	609°4	622°5	627°8	
623°0	625°2	625°0	622°6	625°7	627°9	625°1	617°2	610°2	600°5	595°5	598°0	601°0	611°8	623°0	625°0	
623°2	624°5	625°3	623°5	626°7	628°0	624°0	616°2	609°4	599°0	596°0	598°2	601°0	613°0	621°5	623°0	
623°0	625°0	625°0	620°5	626°8	629°0	623°5	615°1	608°2	597°4	596°2	598°9	605°0	613°0	621°0	622°5	
623°0	624°0	625°5	620°0	626°8	629°0	623°7	614°0	608°0	596°2	596°0	599°0	606°0	611°0	621°5	623°0	
622°0	624°0	625°0	619°5	627°0	629°0	623°2	612°5	608°2	595°0	595°8	599°2	606°0	611°0	623°0	623°0	
622°0	624°0	625°1	620°0	628°0	628°2	623°1	611°5	605°7	595°2	596°0	600°0	606°2	614°5	623°0	623°0	
622°2	624°3	625°1	620°0	628°0	627°1	622°0	611°2	603°8	595°0	596°0	600°2	606°8	616°0	623°2	624°5	
622°2	624°0	625°5	620°0	628°0	627°0	621°0	611°0	601°2	595°0	596°1	601°2	607°0	617°5	622°0	625°0	
622°3	624°0	625°0	620°0	628°2	627°5	620°0	611°0	601°2	595°0	596°5	602°0	607°8	619°2	623°0	625°0	
622°0	624°0	625°0	625°5	629°7	626°9	619°8	611°2	601°2	595°0	596°6	602°0	608°0	620°5	625°3	625°0	
VERTICAL FORCE.			VERTICAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.	
134°8	134°8	134°8	134°7	134°1	136°7	137°5	138°8	140°8	139°5	139°1	139°1	139°2	140°7	141°5	141°9	
134°0	134°8	134°8	134°7	134°1	136°7	137°5	139°2	141°2	139°0	139°1	139°1	139°2	140°7	141°5	141°9	
134°0	134°8	135°4	134°7	134°1	137°1	137°5	139°2	141°2	139°0	139°1	139°1	139°2	140°7	142°0	141°9	
134°0	134°8	135°4	134°7	134°1	137°1	137°5	139°3	141°2	139°0	139°1	139°1	139°2	140°7	142°0	141°9	
134°9	134°8	135°3	134°4	134°9	137°1	137°5	140°0	141°2	139°0	139°1	139°3	139°2	140°7	142°0	141°9	
134°9	134°8	135°0	134°0	134°9	137°5	137°5	140°0	141°5	139°0	139°1	139°3	139°2	140°7	142°0	141°3	
134°9	134°8	134°7	134°1	134°9	137°5	138°5	140°0	141°5	138°6	139°1	139°7	139°2	140°7	142°4	141°3	
134°8	134°8	134°7	134°1	135°6	137°5	138°5	140°0	140°7	138°6	139°1	139°7	139°2	140°7	142°4	141°3	
134°8	134°8	134°7	134°1	135°6	137°5	138°5	140°0	140°7	138°6	139°1	139°7	139°2	141°5	142°4	141°3	
134°8	134°8	134°7	134°1	135°6	137°5	138°8	140°0	139°9	138°6	139°1	139°7	139°2	141°5	142°3	140°9	
134°8	134°8	134°7	134°1	136°7	137°5	138°8	140°8	139°9	138°6	139°1	139°7	139°4	141°5	141°9	140°9	
134°8	134°8	134°7	134°1	136°7	137°5	138°8	140°8	139°9	138°6	139°1	139°7	139°4	141°5	141°9	140°9	
decreasing Westerly Declination,			and increasing Horizontal and Vertical Force.													
62°5	62°4	62°7	62°5	62°5	62°0	61°2	60°7	61°3	61°3	61°5	61°5	61°5	61°5	61°5	61°5	



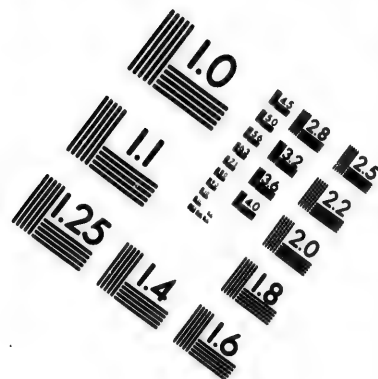
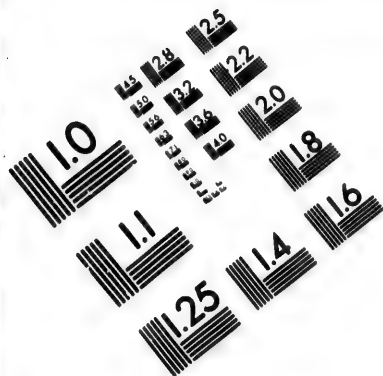
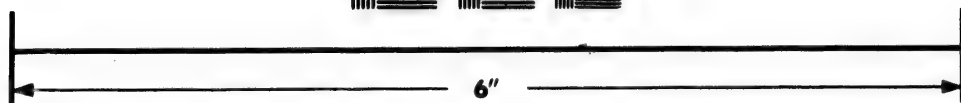
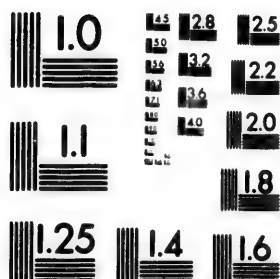


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

1.8 2.0 2.2 2.5 2.8 3.2 3.6 4.0 4.5 5.0 5.6 6.3 7.1 8.0 9.0 10.0 11.2 12.5 14.0 16.0 18.0 20.0 22.4 25.0 28.0 31.5 36.0 40.0 45.0 50.0 56.0 63.0 71.0 80.0 90.0 100.0

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NATION.

	19°.	20°.
0.	82°0	82°0
1.	83°4	83°4
2.	84°8	84°8
3.	86°2	86°2
4.	87°6	87°6
5.	89°0	89°0
6.	90°4	90°4
7.	91°8	91°8
8.	93°2	93°2
9.	94°6	94°6
10.	96°0	96°0
11.	97°4	97°4
12.	98°8	98°8
13.	100°2	100°2
14.	101°6	101°6
15.	103°0	103°0
16.	104°4	104°4
17.	105°8	105°8
18.	107°2	107°2
19.	108°6	108°6
20.	110°0	110°0

HORIZONTAL FORCE.

0	560°0	529°8
1	560°5	478°8
2	562°7	525°0
3	564°9	531°5
4	567°1	538°0
5	569°3	544°5
6	571°5	551°0
7	573°7	557°5
8	575°9	564°0
9	578°1	570°5
10	580°3	577°0
11	582°5	583°5
12	584°7	590°0
13	586°9	596°5
14	589°1	603°0
15	591°3	609°5
16	593°5	616°0
17	595°7	622°5
18	597°9	629°0
19	600°1	635°5
20	602°3	642°0

VERTICAL FORCE.

1	201°0	184°0
2	207°3	193°0
3	213°0	191°8
4	219°5	184°0
5	226°9	149°8
6	234°0	141°1
7	241°5	154°6
8	249°5	168°5
9	257°0	157°0
10	265°2	157°2
11	273°4	159°3
12	281°6	163°0
13	289°8	163°0
14	298°0	163°0
15	306°2	163°0
16	314°4	163°0
17	322°6	163°0
18	330°8	163°0
19	339°0	163°0
20	347°2	163°0

and increasing Westerly Declination,

MAGNETICAL OBSERVATIONS.

October 18th and 19th.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
146°5	136°0	117°4	93°5	106°4	111°6	120°0	110°6	112°0	109°4	110°6	107°4	110°0
150°4	133°4	120°4	83°2	108°8	113°4	120°4	119°0	109°4	109°9	113°4	109°0	109°0
163°8	129°8	118°6	76°0	112°8	115°5	118°4	112°5	111°2	110°0	108°1	108°0	108°9
159°4	123°4	117°4	78°0	105°4	117°4	117°6	112°3	111°0	106°0	109°8	109°4	107°0
147°0	120°0	111°4	78°1	116°0	116°4	111°4	112°8	109°4	110°4	108°4	110°3	107°7
147°4	127°2	114°4	89°4	121°2	117°6	114°4	113°8	108°8	111°2	108°0	110°9	106°6
150°4	125°9	113°3	90°5	117°4	118°4	116°6	110°8	108°5	109°4	108°0	111°0	106°6
147°4	124°4	113°0	91°6	118°8	118°8	118°4	110°9	109°4	107°0	109°5	110°4	107°6
141°0	107°0	114°4	98°0	120°4	119°6	121°4	111°4	114°4	108°0	109°4	109°6	107°4
137°0	105°5	104°4	98°4	114°8	119°8	118°4	112°8	110°6	108°4	109°0	110°0	107°6
137°5	114°9	101°5	97°0	115°4	117°4	118°9	113°4	111°2	110°8	110°4	109°8	108°3
137°0	112°4	92°5	103°5	115°4	118°4	120°1	112°6	110°4	110°2	110°3	109°6	109°7

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

400°0	535°5	586°0	548°5	587°0	589°6	581°2	578°0	587°0	593°2	608°4	595°5	611°5
448°0	561°6	604°0	545°0	588°8	593°8	579°4	579°0	592°0	591°0	607°0	597°2	613°0
485°5	560°4	589°5	519°0	575°5	591°5	574°5	577°5	590°0	591°0	609°0	597°0	622°0
468°9	571°5	587°0	516°0	591°2	591°2	576°0	581°0	590°0	602°0	605°4	598°2	620°5
481°0	567°5	584°2	521°5	594°5	589°4	572°0	590°0	590°0	600°0	597°5	598°0	625°0
511°9	589°5	585°0	521°5	604°2	588°8	570°0	591°0	590°0	593°8	615°0	605°0	624°0
517°0	565°0	583°0	558°3	603°5	588°2	569°0	591°0	590°2	600°0	603°5	609°0	616°5
520°0	608°0	587°0	557°5	601°8	583°8	570°5	595°0	593°0	599°2	597°0	612°0	609°0
526°0	573°5	585°0	579°0	601°4	581°6	578°5	592°2	604°2	598°0	591°0	612°2	609°0
523°0	577°5	567°5	575°0	598°6	583°8	580°5	591°5	602°0	598°0	589°5	611°0	609°0
526°0	591°0	559°5	570°0	601°2	581°4	586°0	586°0	594°4	598°2	587°5	610°0	609°8
523°0	586°0	554°5	590°0	600°7	580°2	577°7	592°0	590°2	599°2	591°6	610°5	611°3

53°0	52°8	52°6	52°9	52°9	52°8	52°9	52°9	53°5	53°5	53°5	54°3	54°5
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

150°9	196°9	223°8	214°3	218°4	232°7	238°4	248°0	238°0	237°8	245°3	242°4	240°8
178°7	210°9	232°2	219°5	219°0	232°9	237°9	248°0	238°0	237°8	245°3	242°4	240°8
177°3	213°0	224°3	209°3	225°2	235°2	239°7	248°0	238°0	237°8	243°1	242°4	242°6
179°5	228°0	224°3	210°8	228°4	235°2	238°1	248°0	238°0	238°5	243°6	242°4	242°6
172°7	230°4	224°3	210°4	227°9	235°2	238°1	248°0	238°2	239°4	244°6	240°8	243°1
169°9	224°9	224°3	202°2	227°9	234°3	240°0	240°7	238°2	239°4	248°8	240°8	243°3
170°6	232°5	225°6	208°7	228°4	234°1	339°5	240°7	238°5	239°7	245°8	241°1	243°2
172°0	231°1	230°7	214°3	229°9	226°0	239°5	240°7	238°5	239°7	243°7	241°1	242°0
173°0	227°0	228°5	212°4	230°1	236°3	239°9	241°7	240°1	239°7	243°7	241°1	242°0
175°4	222°5	221°2	218°2	230°1	236°4	241°6	241°5	240°1	243°1	243°2	241°1	242°0
178°5	228°4	219°6	214°2	231°4	238°5	241°6	238°1	237°8	241°7	242°4	240°8	243°2
186°1	227°4	219°0	216°5	231°4	238°4	242°8	238°1	237°8	241°7	242°4	240°8	243°2

and increasing Horizontal and Vertical Force.

November 24th and 25th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0'721.						DECLINATION.					
		10 ^h .	11 ^h .	12 ^h .	13 ^h .	14 ^h .	15 ^h .	16 ^h .	17 ^h .	18 ^h .	19 ^h .	20 ^h .	
M.	s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	111°4	111°2	112°2	113°5	113°6	113°4	112°0	111°4	111°8	113°3	113°0	
5	0	110°4	110°4	112°4	114°2	113°4	113°0	111°7	111°4	112°3	113°4	113°0	
10	0	111°4	111°6	112°5	114°2	113°5	113°4	111°5	111°3	112°4	113°4	112°9	
15	0	111°2	111°5	113°4	114°4	113°3	113°0	111°6	111°3	111°9	113°6	111°8	
20	0	111°4	111°2	113°5	114°2	113°4	113°0	111°6	111°4	112°4	113°5	113°0	
25	0	110°2	111°8	112°2	114°0	113°4	112°4	111°6	111°8	112°0	113°2	113°5	
30	0	111°4	111°8	114°2	113°8	113°4	112°4	111°6	111°6	112°4	112°6	112°0	
35	0	110°4	111°8	113°4	113°5	113°4	112°2	111°9	111°6	112°3	112°0	111°3	
40	0	111°2	112°4	113°4	113°4	114°0	112°0	111°6	111°5	112°4	112°0	110°4	
45	0	111°4	112°0	113°4	112°6	113°3	112°2	111°5	111°8	113°0	112°3	109°3	
50	0	111°2	113°2	113°4	113°8	113°4	112°0	111°5	111°3	113°3	112°7	108°4	
55	0	110°2	111°8	113°4	113°4	113°4	111°8	111°6	111°8	113°4	113°0	109°4	
M. s.		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
		631°2	630°2	631°2	632°2	633°0	631°2	631°5	631°0	631°0	630°5	636°0	
2	0	631°5	630°2	631°2	632°2	633°2	631°2	631°1	631°0	631°0	631°0	635°0	
7	0	631°0	631°2	632°2	633°4	633°2	631°8	631°0	631°0	629°0	631°0	635°0	
12	0	629°2	630°8	632°4	634°0	632°2	632°0	631°2	631°0	629°0	631°1	637°1	
17	0	631°8	629°2	631°2	634°2	631°8	632°0	631°0	630°5	630°0	632°5	637°0	
22	0	631°2	630°2	633°2	633°0	632°2	631°8	630°0	629°5	629°2	633°5	633°0	
27	0	628°2	630°2	635°4	633°0	632°4	632°0	631°0	630°0	630°0	635°0	635°0	
32	0	626°8	629°2	636°0	631°4	631°2	631°8	630°8	630°0	630°1	631°0	630°0	
37	0	632°2	630°0	632°8	631°2	631°4	630°0	630°2	629°0	630°2	631°5	632°0	
42	0	632°5	631°8	632°2	630°8	631°7	630°2	629°8	631°5	629°0	632°0	632°0	
47	0	630°8	631°8	633°8	631°0	631°8	630°3	630°0	633°0	629°7	632°5	632°0	
52	0	630°2	631°0	635°0	632°4	632°0	631°0	629°7	631°3	630°2	632°2	615°0	
Thermometer		52°8	53°6	54°1	55°0	55°0	55°0	55°0	54°8	54°4	54°4	54°6	
M. s.		One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
		239°1	235°0	234°1	233°1	232°5	231°6	230°6	232°9	235°0	232°0	230°7	
3	0	238°3	235°3	234°1	233°1	232°5	231°6	231°4	232°9	235°0	232°0	230°7	
8	0	237°8	235°3	234°9	232°7	232°7	231°6	231°4	232°9	234°6	231°6	230°7	
13	0	237°8	235°3	234°9	232°7	232°7	231°6	231°4	232°9	234°6	231°6	230°7	
18	0	237°0	234°0	235°0	232°7	232°7	231°6	231°5	232°9	231°6	231°6	230°7	
23	0	236°5	233°9	235°0	232°2	232°1	231°6	231°5	233°1	234°6	231°6	229°9	
28	0	236°1	233°9	235°0	232°2	232°1	231°6	231°5	233°1	234°6	231°6	230°0	
33	0	235°4	233°9	235°0	232°2	232°1	231°6	231°7	235°0	233°0	231°6	229°5	
38	0	235°4	233°3	234°2	232°1	232°1	230°6	232°9	235°0	233°0	231°6	229°5	
43	0	235°0	233°3	233°1	232°3	232°1	230°6	232°9	235°0	232°7	231°6	229°5	
48	0	235°0	233°9	233°1	232°3	232°1	230°6	232°9	235°0	232°0	231°6	228°2	
53	0	235°0	234°1	233°1	232°3	232°1	230°6	232°9	235°0	232°0	230°7	228°2	
58	0	235°0	234°1	233°1	232°3	232°1	230°6	232°9	235°0	232°0	230°7	228°2	
Thermometer		52°2	54°2	55°2	56°0	55°7	55°8	55°8	55°7	55°3	56°2	56°8	

Increasing Numbers denote decreasing Westerly Declination.

MAGNETICAL OBSERVATIONS.

November 24th and 25th.

DECLINATION.

Angular Value of one Scale Division = $0^{\circ}721$.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
109 ⁴	118 ⁵	123 ⁴	120 ²	117 ²	119 ⁸	119 ⁰	113 ⁹	108 ⁷	105 ⁶	106 ⁴	109 ⁴	111 ⁴
107 ⁵	118 ³	123 ⁵	119 ²	120 ⁴	120 ⁴	117 ⁴	113 ⁴	108 ⁸	106 ⁶	106 ⁶	109 ⁰	111 ⁶
112 ⁴	112 ⁶	122 ⁴	120 ³	118 ⁴	120 ⁴	112 ⁴	113 ³	109 ⁴	106 ²	107 ²	109 ⁸	112 ²
114 ³	115 ⁵	120 ⁶	119 ⁴	118 ⁸	120 ⁰	113 ⁴	114 ⁴	108 ²	106 ³	107 ⁰	109 ⁷	112 ²
114 ⁴	115 ⁴	119 ²	119 ⁹	116 ⁴	121 ⁶	115 ⁰	113 ²	107 ⁶	106 ³	107 ⁴	110 ¹	112 ⁴
118 ⁵	116 ⁵	119 ⁴	120 ²	119 ⁰	121 ⁸	116 ⁰	112 ⁵	106 ⁶	106 ⁰	107 ⁵	110 ⁴	112 ⁴
119 ⁶	117 ⁴	118 ³	119 ⁴	118 ⁴	126 ⁰	114 ⁴	111 ⁶	106 ⁶	105 ⁶	108 ⁴	110 ⁴	113 ²
121 ⁶	115 ⁵	119 ⁷	119 ⁵	120 ³	123 ⁸	117 ⁴	111 ⁴	107 ⁴	105 ⁶	108 ⁵	110 ⁴	113 ⁴
122 ²	120 ⁰	119 ²	119 ²	121 ⁸	123 ⁵	113 ⁷	110 ⁴	107 ⁰	105 ⁴	109 ⁰	110 ⁴	113 ²
122 ⁰	118 ⁶	120 ²	119 ⁴	122 ⁰	122 ⁸	113 ⁶	110 ⁰	106 ⁵	106 ²	109 ⁶	110 ⁸	113 ³
120 ⁴	120 ⁵	119 ²	118 ⁶	121 ⁵	125 ⁴	114 ⁰	110 ⁰	106 ⁶	106 ²	109 ⁴	111 ¹	113 ⁴
120 ⁴	120 ⁸	119 ⁰	117 ⁸	121 ⁴	125 ⁶	114 ⁴	109 ⁴	105 ⁷	105 ⁴	109 ⁶	111 ⁴	113 ⁴

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}63$.

638 ⁰	642 ⁰	640 ⁸	640 ²	629 ⁰	633 ³	618 ⁰	613 ²	613 ⁵	618 ⁵	629 ⁰	635 ⁰	638 ⁰
638 ⁵	637 ²	640 ⁰	637 ³	631 ²	626 ⁰	610 ⁰	612 ⁵	615 ⁰	621 ²	630 ⁰	635 ⁰	638 ⁰
641 ¹	638 ⁹	640 ⁵	639 ⁰	633 ⁵	627 ⁰	618 ⁰	613 ⁰	616 ⁰	623 ⁰	629 ⁰	635 ⁸	637 ⁹
643 ⁷	637 ⁵	640 ²	641 ⁴	631 ⁰	627 ⁴	619 ⁰	613 ⁰	618 ⁰	623 ⁰	630 ⁰	636 ⁵	637 ⁰
639 ⁰	640 ²	638 ⁵	639 ⁵	631 ⁰	623 ⁹	618 ⁰	614 ⁰	619 ⁰	624 ⁰	632 ⁰	636 ⁰	637 ⁵
642 ⁰	640 ²	637 ⁸	638 ⁷	630 ⁰	624 ⁰	620 ⁰	614 ³	618 ⁵	625 ⁰	630 ⁰	637 ⁰	636 ⁹
641 ⁰	641 ²	638 ⁰	639 ⁴	629 ⁸	625 ⁰	607 ⁵	614 ⁰	620 ⁰	625 ⁰	630 ⁰	637 ⁰	636 ⁰
643 ⁵	640 ⁵	640 ²	637 ⁸	631 ⁰	625 ²	618 ⁰	615 ⁰	619 ⁰	626 ⁰	631 ⁰	637 ⁰	634 ⁵
641 ⁰	639 ⁹	638 ⁸	638 ⁰	629 ⁰	627 ⁰	621 ⁰	614 ⁵	618 ²	628 ⁰	632 ⁰	637 ⁰	636 ⁹
640 ⁰	641 ⁸	640 ⁰	638 ⁴	628 ⁸	626 ⁸	617 ⁰	614 ⁰	620 ⁵	627 ⁵	631 ⁰	637 ⁰	637 ⁵
640 ⁰	642 ⁵	638 ⁸	633 ⁴	628 ⁰	623 ⁰	614 ⁰	617 ⁵	621 ⁰	632 ⁰	633 ⁵	637 ⁵	636 ⁰
642 ⁰	643 ⁰	640 ⁰	634 ⁰	628 ⁰	622 ⁸	615 ⁰	615 ⁵	619 ⁰	632 ⁰	634 ⁰	637 ⁰	638 ⁰
54 ⁶	54 ⁵	54 ¹	53 ⁹	53 ⁸	53 ²	52 ⁵	52 ²	52 ²	52 ⁰	52 ⁰	51 ⁸	52 ⁰

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, $1^{\circ}64$.

228 ²	228 ⁷	227 ⁵	228 ²	230 ²	236 ⁹	237 ⁴	239 ⁰	239 ⁷	240 ⁹	241 ⁹	242 ⁰	242 ⁵
227 ¹	228 ⁷	227 ⁸	228 ²	230 ²	236 ⁹	237 ⁴	239 ⁰	239 ⁷	240 ⁹	241 ⁹	242 ⁰	242 ⁵
227 ⁰	228 ⁶	227 ⁸	228 ²	230 ⁷	236 ⁵	238 ¹	238 ⁴	239 ⁷	240 ⁹	241 ⁹	242 ⁰	242 ⁵
225 ²	228 ⁶	227 ⁸	228 ²	230 ⁷	235 ⁹	238 ¹	238 ⁴	239 ⁷	241 ⁶	241 ⁹	242 ⁴	242 ³
223 ³	228 ⁶	227 ⁸	229 ⁴	230 ⁷	235 ⁹	238 ¹	238 ⁴	239 ⁷	241 ⁶	241 ⁹	242 ⁵	242 ³
223 ³	228 ⁶	228 ¹	229 ⁴	232 ⁰	235 ⁵	239 ⁰	238 ⁴	239 ⁷	241 ⁶	241 ⁹	242 ⁵	242 ³
224 ¹	228 ¹	228 ¹	229 ⁴	232 ⁰	235 ⁵	236 ⁴	239 ⁷	239 ⁷	241 ⁶	241 ⁹	242 ⁵	242 ³
226 ¹	228 ¹	228 ¹	229 ⁴	232 ⁰	235 ⁵	238 ⁵	239 ⁷	239 ⁷	241 ⁶	241 ⁹	242 ⁵	242 ³
226 ¹	227 ⁷	228 ¹	229 ⁷	232 ⁸	235 ⁵	238 ⁵	239 ⁷	239 ⁷	241 ⁶	242 ⁰	242 ⁵	242 ³
228 ⁹	227 ⁷	228 ²	229 ⁷	232 ⁸	235 ⁵	238 ⁵	239 ⁷	240 ⁰	241 ⁶	242 ⁰	242 ⁵	242 ³
227 ⁴	227 ⁷	228 ²	230 ⁰	232 ⁸	234 ⁸	238 ⁵	239 ⁷	240 ⁹	242 ³	242 ⁰	242 ⁵	242 ³
228 ⁴	227 ⁵	228 ²	230 ²	232 ⁸	234 ⁸	238 ⁵	239 ⁷	240 ⁹	242 ³	242 ⁰	242 ⁵	242 ³
52 ⁰	56 ⁴	55 ⁶	56 ³	55 ⁴	53 ⁹	53 ⁰	52 ²	52 ⁷	52 ²	52 ²	52 ²	52 ²

and increasing Horizontal and Vertical Force.

MAGNETICAL OBSERVATIONS.

December 20th and 21st.

DECLINATION.

Angular Value of one Scale Division = 0'.721.

21 ^h .	22 ^h .	23 ^h .	0 ^h .	1 ^h .	2 ^h .	3 ^h .	4 ^h .	5 ^h .	6 ^h .	7 ^h .	8 ^h .	9 ^h .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
113°2	115°0	107°6	107°4	101°9	117°5	121°6	119°1	114°8	110°8	109°5	109°4	110°4
113°3	116°4	107°4	109°8	102°3	115°6	123°0	118°3	117°4	111°4	108°8	109°4	110°8
113°3	116°4	105°4	110°4	103°4	118°6	122°9	118°1	115°0	110°4	109°0	108°6	110°4
107°8	116°2	102°4	108°6	105°4	117°6	122°4	118°4	115°4	111°3	109°2	109°4	110°4
115°9	115°6	100°7	108°6	107°4	118°4	121°6	118°2	115°8	111°4	107°4	109°3	110°5
116°0	116°3	96°6	106°7	109°4	120°4	122°4	117°4	115°4	111°0	107°0	109°3	111°3
117°9	117°3	96°4	106°4	109°4	121°4	122°4	117°4	112°4	110°4	108°7	109°2	111°4
117°9	119°4	91°9	105°6	110°0	121°2	121°6	116°4	110°3	109°2	109°0	109°2	111°6
118°1	116°0	90°0	105°2	110°7	123°4	121°4	117°6	114°8	108°4	108°6	109°4	112°0
116°4	113°4	91°4	105°4	111°4	124°5	122°4	115°4	115°2	107°8	109°4	109°0	111°4
116°6	111°6	95°4	101°4	115°2	123°3	119°4	117°0	116°4	108°4	109°6	109°5	111°5
114°4	111°2	102°4	101°3	116°4	122°4	119°3	117°4	112°8	110°4	109°4	110°0	112°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

667°0	664°0	653°0	682°0	671°0	663°0	658°5	652°0	651°2	655°4	651°0	653°0	667°0
667°2	667°0	658°0	684°5	670°0	660°0	659°0	652°0	650°2	651°6	651°8	654°2	664°0
667°2	668°5	652°0	686°0	670°0	662°0	661°0	651°2	651°1	656°2	650°0	654°0	663°8
657°0	671°0	650°0	687°0	669°0	664°0	659°6	651°8	650°5	654°2	651°8	650°0	670°0
667°4	668°5	650°2	688°1	666°1	664°0	658°5	652°8	654°2	655°2	655°0	654°0	670°4
667°8	669°0	649°1	684°0	665°5	663°5	658°0	650°2	654°0	652°5	655°2	656°0	666°8
668°5	671°5	666°5	681°8	666°0	665°0	658°0	648°8	652°2	652°2	651°0	659°0	666°8
669°0	671°0	675°0	679°5	663°6	661°0	656°0	647°8	648°4	656°8	648°0	660°0	667°4
669°0	669°8	678°5	676°0	663°0	663°0	657°0	647°2	642°3	658°0	650°0	661°0	667°0
666°2	661°3	678°0	678°0	664°0	663°0	655°0	647°4	645°2	659°8	651°0	664°0	667°2
665°8	660°0	681°0	674°0	663°0	661°0	652°5	647°2	646°2	652°6	650°5	669°2	666°0
666°6	655°1	680°5	672°0	663°0	660°8	653°0	649°4	655°0	651°5	651°0	671°0	662°2
46°0	46°0	46°3	46°5	45°7	46°0	46°0	45°2	45°5	45°6	45°6	45°3	44°7

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

247°1	238°7	234°9	223°9	235°5	242°2	246°6	247°4	248°3	248°5	248°9	251°7	251°6
247°1	237°9	234°7	226°9	235°5	242°2	246°6	247°4	248°3	248°5	248°9	251°7	251°6
247°1	237°9	230°2	228°7	235°5	242°5	247°4	247°4	248°3	248°5	248°9	251°7	251°6
247°9	237°9	226°8	230°6	237°0	243°7	247°4	247°4	248°3	248°5	249°2	251°6	251°6
247°5	237°9	225°1	231°7	238°5	243°7	247°4	247°4	248°3	248°0	251°7	251°6	251°6
247°5	237°6	222°8	231°7	239°4	243°7	247°4	247°4	248°3	248°0	251°7	251°6	251°6
247°5	237°6	225°9	232°0	239°4	243°7	247°4	247°4	248°0	249°0	251°7	251°6	251°6
247°5	237°6	225°9	232°2	239°4	245°4	247°4	247°4	248°0	249°0	251°7	251°6	251°6
247°5	237°3	224°3	232°2	240°7	245°4	247°4	247°5	247°5	249°6	251°7	251°6	251°6
241°5	237°0	222°0	233°6	240°7	246°2	247°4	247°5	248°7	249°6	251°7	251°6	251°6
241°5	237°0	222°0	235°5	241°3	246°2	247°4	247°5	248°0	248°9	251°7	252°7	251°6
241°8	235°2	222°4	235°5	242°2	246°6	247°4	247°6	248°5	248°9	251°7	252°7	251°5
46°6	46°6	47°2	47°3	47°4	46°4	46°0	45°4	45°6	45°6	45°4	45°2	44°8

and increasing Horizontal and Vertical Force.



TORONTO, 1846 to 1848.

METEOROLOGICAL OBSERVATIONS.

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Gttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'714	2'684	2'674	2'638	2'641	2'619	2'569	2'521	2'489	2'469	2'449	2'367
2	1'929	1'907	1'866	1'872	1'861	1'865	1'855	1'833	1'829	1'835	1'845	1'858
3	2'314	2'356	2'388	2'416	2'443	2'439	2'427	2'424	2'421	2'407	2'427	2'441
4	—	—	—	—	—	—	—	—	—	—	—	—
5	2'694	2'716	2'732	2'748	2'791	2'797	2'804	2'798	2'806	2'832	2'842	2'855
6	3'002	3'016	3'024	3'032	3'035	3'034	2'983	2'953	2'919	2'911	2'895	2'864
7	2'370	2'360	2'330	2'304	2'300	2'275	2'227	2'215	2'201	2'200	2'186	2'211
8	2'393	2'415	2'425	2'453	2'447	2'451	2'447	2'454	2'462	2'478	2'493	2'511
9	2'562	2'547	2'556	2'581	2'594	2'590	2'572	2'561	2'555	2'555	2'551	2'541
10	2'470	2'470	2'465	2'454	2'443	2'414	2'378	2'328	2'298	2'278	2'232	2'267
11	—	—	—	—	—	—	—	—	—	—	—	—
12	2'329	2'339	2'351	2'375	2'393	2'401	2'401	2'400	2'416	2'438	2'464	2'494
13	2'765	2'786	2'824	2'840	2'856	2'844	2'825	2'812	2'819	2'818	2'818	2'818
14	2'566	2'562	2'558	2'561	2'587	2'582	2'567	2'576	2'590	2'615	2'625	2'633
15	2'636	2'646	2'644	2'646	2'626	2'591	2'558	2'535	2'527	2'509	2'501	2'506
16	2'486	2'482	2'488	2'514	2'516	2'492	2'472	2'468	2'468	2'470	2'466	2'480
17	2'536	2'547	2'572	2'580	2'583	2'577	2'547	2'555	2'558	2'580	2'612	2'617
18	—	—	—	—	—	—	—	—	—	—	—	—
19	3'121	3'116	3'137	3'171	3'173	3'167	3'157	3'143	3'152	3'156	3'133	3'157
20	3'073	3'073	3'064	3'078	3'057	3'008	2'982	2'922	2'899	2'893	2'878	2'858
21	2'498	2'506	2'531	2'537	2'532	2'512	2'490	2'481	2'491	2'525	2'545	2'551
22	3'078	3'120	3'144	3'154	3'161	3'167	3'157	3'135	3'147	3'184	3'193	3'212
23	3'293	3'319	3'335	3'335	3'317	3'303	3'268	3'224	3'200	3'181	3'151	3'153
24	2'897	2'891	2'867	2'871	2'835	2'816	2'766	2'700	2'648	2'618	2'592	2'560
25	—	—	—	—	—	—	—	—	—	—	—	—
26	2'340	2'322	2'322	2'320	2'319	2'281	2'273	2'240	2'238	2'246	2'256	2'248
27	2'618	2'638	2'670	2'701	2'718	2'724	2'714	2'702	2'678	2'664	2'663	2'665
28	2'571	2'583	2'609	2'631	2'659	2'658	2'660	2'655	2'643	2'658	2'676	2'683
29	2'675	2'679	2'671	2'668	2'656	2'633	2'598	2'552	2'556	2'546	2'506	2'558
30	2'268	2'262	2'270	2'242	2'231	2'225	2'225	2'215	2'215	2'215	2'204	2'214
31	2'540	2'590	2'656	2'692	2'739	2'766	2'778	2'776	2'794	2'824	2'861	2'902
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6199	2'6271	2'6360	2'6451	2'6487	2'6382	2'6185	2'5992	2'5934	2'5960	2'5944	2'6009
1	2'910	2'907	2'913	2'913	2'910	2'902	2'882	2'877	2'840	2'822	2'807	2'798
2	2'586	2'578	2'602	2'616	2'626	2'624	2'587	2'568	2'559	2'560	2'563	2'577
3	2'772	2'788	2'808	2'817	2'814	2'798	2'752	2'700	2'650	2'606	2'565	2'536
4	2'375	2'411	2'431	2'484	2'512	2'526	2'546	2'558	2'584	2'615	2'645	2'659
5	2'787	2'806	2'806	2'810	2'820	2'812	2'786	2'725	2'701	2'673	2'657	2'643
6	2'269	2'251	2'243	2'202	2'176	2'145	2'110	2'074	2'039	2'031	2'029	2'029
7	—	—	—	—	—	—	—	—	—	—	—	—
8	2'600	2'632	2'684	2'722	2'753	2'771	2'791	2'797	2'789	2'797	2'810	2'829
9	2'851	2'835	2'816	2'823	2'817	2'798	2'751	2'687	2'659	2'621	2'592	2'591
10	2'430	2'409	2'415	2'412	2'412	2'427	2'417	2'421	2'422	2'433	2'454	2'462
11	2'818	2'857	2'877	2'897	2'913	2'920	2'910	2'900	2'894	2'891	2'894	2'902
12	2'854	2'865	2'895	2'892	2'880	2'877	2'861	2'840	2'814	2'795	2'805	2'784
13	2'710	2'729	2'727	2'714	2'710	2'692	2'650	2'609	2'586	2'592	2'572	2'553
14	—	—	—	—	—	—	—	—	—	—	—	—
15	2'555	2'560	2'566	2'548	2'528	2'522	2'496	2'478	2'472	2'468	2'482	2'490
16	2'618	2'680	2'684	2'713	2'712	2'732	2'729	2'732	2'730	2'732	2'741	2'751
17	2'911	2'923	2'946	2'964	2'969	2'983	2'988	2'968	2'957	2'965	2'965	2'965
18	2'909	2'890	2'895	2'859	2'829	2'791	2'758	2'753	2'727	2'682	2'632	2'611
19	2'108	2'086	2'069	2'039	2'009	1'991	1'966	1'959	1'940	1'929	1'919	1'917
20	1'961	1'983	1'993	2'023	2'047	2'070	2'070	2'052	2'052	2'066	2'094	2'122
21	—	—	—	—	—	—	—	—	—	—	—	—
22	2'436	2'448	2'450	2'448	2'440	2'438	2'424	2'406	2'395	2'405	2'376	2'359
23	2'613	2'637	2'677	2'695	2'692	2'696	2'684	2'691	2'705	2'722	2'748	2'772
24	2'878	2'900	2'909	2'915	2'935	2'907	2'900	2'888	2'875	2'876	2'875	2'885
25	3'122	3'143	3'182	3'202	3'217	3'231	3'226	3'214	3'198	3'198	3'200	3'208
26	3'219	3'218	3'220	3'211	3'192	3'168	3'143	3'097	3'078	3'046	3'009	3'008
27	2'727	2'727	2'740	2'724	2'714	2'708	2'695	2'692	2'692	2'694	2'702	2'719
28	—	—	—	—	—	—	—	—	—	—	—	—
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6687	2'6776	2'6895	2'6933	2'6932	2'6888	2'6724	2'6536	2'6399	2'6341	2'6307	2'6302

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
109	2'419	2'367	2'342	2'318	2'280	2'256	2'229	2'175	2'145	2'108	2'082	2'038	2'006	1'957	2'3642
105	2'415	2'363	1'886	1'934	1'976	2'010	2'042	2'063	2'132	2'162	2'205	2'235	2'256	2'281	1'9821
107	2'427	2'411	2'453	2'465	2'479	2'475	2'477	2'481	—	—	—	—	—	—	2'4816
103	2'417	2'365	—	—	—	—	—	—	2'601	2'603	2'609	2'651	2'675	2'686	2'8612
101	2'395	2'361	2'863	2'875	2'903	2'920	2'934	2'953	2'959	2'956	2'965	2'968	2'978	2'976	2'8039
200	2'186	2'211	2'853	2'829	2'789	2'764	2'733	2'644	2'606	2'566	2'532	2'483	2'439	2'391	2'2830
178	2'493	2'514	2'296	2'236	2'240	2'265	2'274	2'286	2'300	2'314	2'342	2'369	2'373	2'377	2'5057
155	2'551	2'511	2'537	2'561	2'569	2'569	2'573	2'573	2'565	2'551	2'551	2'551	2'556	2'550	2'5529
178	2'232	2'267	2'534	2'567	2'567	2'573	2'563	2'563	2'551	2'535	2'529	2'521	2'501	2'473	—
138	2'464	2'494	2'258	2'246	2'246	2'232	2'218	2'201	—	—	—	—	—	—	2'3184
118	2'818	2'818	2'526	2'548	2'566	2'597	2'627	2'645	2'657	2'684	2'706	2'714	2'743	2'746	2'5233
115	2'625	2'653	2'418	2'796	2'778	2'754	2'738	2'726	2'693	2'652	2'652	2'628	2'602	2'576	2'7599
109	2'504	2'506	2'639	2'654	2'648	2'631	2'636	2'634	2'635	2'644	2'654	2'646	2'642	2'635	2'6133
170	2'466	2'480	2'516	2'516	2'528	2'548	2'552	2'548	2'520	2'512	2'528	2'517	2'497	2'490	2'5500
180	2'612	2'617	2'481	2'481	2'482	2'484	2'486	2'495	2'491	2'492	2'513	2'528	2'520	2'519	2'4906
156	3'133	3'157	2'684	2'708	2'733	2'752	2'772	2'784	—	—	—	—	—	—	2'7387
103	2'878	2'838	—	—	—	—	—	—	3'026	3'034	3'072	3'080	3'065	3'066	3'1323
125	2'545	2'551	3'151	3'141	3'141	3'143	3'148	3'132	3'112	3'097	3'047	3'105	3'103	3'073	2'8224
184	3'193	3'212	2'825	2'784	2'759	2'733	2'692	2'685	2'649	2'635	2'596	2'570	2'536	2'508	2'6546
181	3'151	3'153	2'598	2'616	2'653	2'690	2'712	2'755	2'812	2'839	2'928	2'967	2'993	3'039	3'2112
118	2'532	2'560	3'239	3'241	3'243	3'257	3'269	3'284	3'284	3'294	3'300	3'301	3'291	3'287	3'1423
246	2'266	2'298	3'117	3'131	3'193	3'067	3'041	3'034	3'023	2'999	2'975	2'951	2'936	2'928	2'6083
164	2'663	2'655	2'553	2'533	2'516	2'495	2'461	2'433	—	—	—	—	—	—	2'3696
158	2'676	2'680	2'392	2'357	2'376	2'400	2'420	2'449	2'463	2'466	2'497	2'519	2'543	2'584	2'6157
146	2'506	2'508	2'610	2'628	2'600	2'576	2'526	2'520	2'508	2'520	2'522	2'527	2'523	2'541	2'6766
201	2'204	2'200	2'608	2'712	2'712	2'726	2'722	2'716	2'715	2'713	2'716	2'720	2'711	2'684	2'4965
124	2'861	2'961	2'504	2'482	2'470	2'430	2'409	2'396	2'368	2'347	2'319	2'321	2'313	2'279	2'2631
960	2'5944	2'6069	2'183	2'183	2'183	2'226	2'230	2'236	2'257	2'310	2'371	2'421	2'456	2'501	2'8366
92	—	—	2'928	2'949	2'953	2'989	2'989	2'980	2'883	2'883	2'901	2'904	2'902	2'900	—
22	2'807	2'798	2'6087	2'6108	2'6112	2'6135	2'6101	2'6082	2'6175	2'6160	2'6250	2'6284	2'6261	2'6206	2'6172
60	2'563	2'557	2'778	2'777	2'751	2'708	2'692	2'675	2'655	2'651	2'647	2'631	2'619	2'603	2'7782
66	2'565	2'559	2'579	2'601	2'611	2'617	2'627	2'661	2'667	2'704	2'723	2'735	2'739	2'762	2'6270
115	2'645	2'679	2'520	2'484	2'453	2'390	2'378	2'368	2'356	2'339	2'339	2'340	2'340	2'364	2'5538
173	2'657	2'613	2'700	2'727	2'739	2'745	2'761	2'769	2'767	2'767	2'772	2'775	2'773	2'786	2'6436
131	2'029	2'029	2'569	2'581	2'562	2'556	2'516	2'456	2'444	2'392	2'366	2'330	2'284	2'281	2'5985
97	2'810	2'832	2'062	2'109	2'135	2'211	2'254	2'282	—	—	—	—	—	—	2'2428
121	2'592	2'591	2'832	2'870	2'882	2'862	2'860	2'872	2'875	2'878	2'880	2'876	2'880	2'873	2'8091
91	2'894	2'902	2'585	2'583	2'571	2'544	2'514	2'508	2'489	2'475	2'458	2'448	2'423	2'430	2'6197
95	2'805	2'789	2'502	2'551	2'605	2'645	2'673	2'703	2'721	2'737	2'744	2'772	2'792	2'804	2'5568
92	2'572	2'563	2'918	2'918	2'920	2'923	2'919	2'915	2'892	2'868	2'878	2'868	2'856	2'852	2'8917
68	2'482	2'499	2'789	2'818	2'816	2'809	2'813	2'800	2'790	2'782	2'787	2'785	2'755	2'716	2'8178
32	2'741	2'754	2'468	2'432	2'362	2'390	2'376	2'340	—	—	—	—	—	—	2'5622
65	2'965	2'955	2'512	2'530	2'543	2'548	2'551	2'551	2'551	2'559	2'553	2'553	2'560	2'555	2'5388
82	2'632	2'611	2'776	2'790	2'808	2'813	2'827	2'828	2'836	2'846	2'852	2'868	2'878	2'901	2'7754
29	1'919	1'917	2'955	2'981	2'981	2'971	2'964	2'960	2'961	2'928	2'933	2'914	2'914	2'904	2'9525
16	2'094	2'122	2'579	2'564	2'557	2'486	2'446	2'410	2'370	2'334	2'298	2'270	2'209	2'139	2'5827
5	2'376	2'370	1'917	1'926	1'921	1'929	1'934	1'936	1'934	1'936	1'942	1'940	1'942	1'946	1'9640
22	2'748	2'772	2'155	2'185	2'193	2'214	2'210	2'206	—	—	—	—	—	—	2'1800
6	2'875	2'885	—	—	—	—	—	—	2'411	2'429	2'438	2'460	2'451	2'436	2'4687
98	3'200	3'208	2'368	2'388	2'470	2'516	2'531	2'531	2'548	2'550	2'571	2'593	2'597	2'597	2'7832
16	3'009	3'008	2'818	2'849	2'857	2'865	2'891	2'888	2'886	2'894	2'894	2'884	2'871	2'868	2'9512
4	2'702	2'719	2'897	2'922	2'943	2'960	2'981	2'999	3'011	3'043	3'057	3'077	3'083	3'112	3'2157
44	2'6307	2'6302	2'724	2'746	2'762	2'784	2'796	2'812	2'827	2'801	2'789	2'785	2'757	2'731	2'9922
	—	—	—	—	—	—	—	—	2'939	2'940	2'940	2'920	2'906	2'924	2'7815
	—	—	2'6353	2'6474	2'6498	2'6517	2'6522	2'6488	2'6771	2'6739	2'6737	2'6729	2'6658	2'6665	2'6620

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Golden Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2	2'952	2'972	2'995	3'000	3'015	3'022	3'023	3'015	3'006	3'000	3'002	3'016
3	3'073	3'090	3'098	3'103	3'099	3'098	3'073	3'043	3'020	2'986	2'975	2'961
4	2'719	2'740	2'735	2'716	2'692	2'661	2'617	2'579	2'521	2'505	2'435	2'433
5	2'567	2'573	2'581	2'584	2'586	2'586	2'593	2'558	2'542	2'531	2'532	2'516
6	2'592	2'596	2'594	2'598	2'514	2'522	2'528	2'526	2'511	2'532	2'553	2'578
7	2'661	2'672	2'668	2'658	2'638	2'622	2'624	2'584	2'526	2'492	2'488	2'496
8	—	—	—	—	—	—	—	—	—	—	—	—
9	2'823	2'865	2'884	2'896	2'903	2'911	2'901	2'886	2'866	2'869	2'858	2'853
10	2'863	2'878	2'900	2'919	2'928	2'926	2'917	2'905	2'887	2'889	2'888	2'890
11	2'854	2'870	2'874	2'868	2'854	2'848	2'823	2'794	2'770	2'752	2'750	2'751
12	2'685	2'682	2'680	2'676	2'659	2'640	2'628	2'614	2'603	2'591	2'555	2'541
13	2'363	2'385	2'378	2'371	2'335	2'307	2'286	2'250	2'173	2'179	2'139	2'114
14	2'089	2'092	2'088	2'064	2'056	2'056	2'052	2'046	2'044	2'042	2'052	2'072
15	—	—	—	—	—	—	—	—	—	—	—	—
16	2'319	2'384	2'399	2'392	2'448	2'482	2'513	2'519	2'531	2'539	2'557	2'577
17	2'718	2'778	2'791	2'805	2'803	2'815	2'813	2'808	2'798	2'795	2'792	2'805
18	2'850	2'861	2'873	2'861	2'858	2'844	2'841	2'810	2'777	2'751	2'752	2'751
19	2'691	2'691	2'651	2'657	2'651	2'639	2'610	2'611	2'602	2'606	2'590	2'589
20	2'700	2'702	2'681	2'693	2'697	2'688	2'663	2'575	2'546	2'540	2'541	2'565
21	2'808	2'832	2'859	2'898	2'911	2'921	2'925	2'921	2'915	2'911	2'912	2'920
22	—	—	—	—	—	—	—	—	—	—	—	—
23	2'742	2'738	2'724	2'706	2'682	2'665	2'649	2'620	2'604	2'592	2'562	2'560
24	2'441	2'453	2'451	2'447	2'441	2'441	2'423	2'410	2'392	2'362	2'359	2'345
25	2'013	2'003	1'977	1'971	1'953	1'934	1'927	1'934	1'942	1'944	1'949	1'988
26	2'114	2'114	2'114	2'090	2'106	2'100	2'084	2'077	2'071	2'070	2'076	2'108
27	2'162	2'178	2'186	2'196	2'213	2'218	2'231	2'213	2'257	2'265	2'251	2'303
28	2'483	2'495	2'497	2'493	2'419	2'413	2'407	2'407	2'407	2'407	2'417	2'441
29	—	—	—	—	—	—	—	—	—	—	—	—
30	2'829	2'845	2'862	2'868	2'874	2'858	2'856	2'848	2'835	2'829	2'829	2'849
31	2'944	2'950	2'971	2'981	2'983	2'979	2'985	2'972	2'966	2'960	2'960	2'969
Hourly Means	2'6137	2'6237	2'6275	2'6282	2'6277	2'6230	2'6151	2'5980	2'5812	2'5746	2'5699	2'5789
APRIL.	1	2	3	4	5	6	7	8	9	10	11	12
1	3'125	3'156	3'174	3'187	3'194	3'187	3'174	3'170	3'145	3'136	3'122	3'127
2	3'145	3'163	3'169	3'180	3'176	3'159	3'146	3'142	3'117	3'112	3'100	3'090
3	3'153	3'166	3'177	3'186	3'188	3'167	3'156	3'156	3'139	3'123	3'110	3'120
4	3'081	3'085	3'095	3'092	3'090	3'089	3'091	3'096	3'071	3'051	3'045	3'029
5	—	—	—	—	—	—	—	—	—	—	—	—
6	3'146	3'170	3'184	3'184	3'185	3'168	3'152	3'127	3'112	3'090	3'074	3'055
7	2'746	2'732	2'732	2'695	2'672	2'659	2'620	2'605	2'581	2'549	2'548	2'541
8	2'895	2'840	2'861	2'876	2'882	2'874	2'863	2'853	2'849	2'855	2'863	2'878
9	3'039	3'076	3'076	3'064	3'052	3'036	3'002	2'968	2'951	2'913	2'898	2'883
10	—	—	—	—	—	—	—	—	—	—	—	—
11	2'179	2'169	2'128	2'106	2'085	2'100	2'119	2'182	2'255	2'307	2'367	2'423
12	—	—	—	—	—	—	—	—	—	—	—	—
13	2'329	2'353	2'373	2'395	2'416	2'431	2'452	2'460	2'476	2'491	2'522	2'551
14	2'653	2'660	2'659	2'646	2'634	2'617	2'583	2'561	2'541	2'514	2'498	2'510
15	2'773	2'855	2'883	2'900	2'918	2'930	2'930	2'939	2'933	2'931	2'933	2'947
16	2'977	2'987	2'976	2'973	2'950	2'935	2'897	2'879	2'850	2'816	2'795	2'792
17	2'715	2'720	2'714	2'703	2'697	2'686	2'664	2'660	2'630	2'604	2'589	2'585
18	2'557	2'645	2'653	2'666	2'669	2'664	2'643	2'629	2'583	2'558	2'533	2'514
19	—	—	—	—	—	—	—	—	—	—	—	—
20	3'010	3'005	3'004	2'997	2'984	2'950	2'921	2'865	2'842	2'804	2'774	2'761
21	2'682	2'676	2'666	2'653	2'634	2'600	2'575	2'555	2'541	2'551	2'574	2'613
22	2'760	2'800	2'808	2'797	2'797	2'797	2'775	2'753	2'736	2'710	2'704	2'700
23	2'639	2'659	2'646	2'654	2'648	2'635	2'617	2'605	2'597	2'565	2'533	2'549
24	2'402	2'400	2'400	2'396	2'398	2'395	2'393	2'383	2'380	2'352	2'356	2'364
25	2'559	2'552	2'608	2'623	2'616	2'610	2'616	2'604	2'604	2'608	2'592	2'592
26	—	—	—	—	—	—	—	—	—	—	—	—
27	2'637	2'656	2'663	2'660	2'656	2'627	2'615	2'620	2'599	2'593	2'574	2'559
28	2'552	2'543	2'542	2'546	2'541	2'511	2'496	2'440	2'440	2'395	2'369	2'368
29	2'299	2'295	2'293	2'285	2'287	2'286	2'278	2'277	2'275	2'277	2'277	2'277
30	2'303	2'290	2'306	2'325	2'334	2'312	2'313	2'290	2'281	2'286	2'292	2'280
Hourly Means	2'7334	2'7470	2'7516	2'7516	2'7481	2'7370	2'7237	2'7128	2'7011	2'6876	2'6823	2'6856

* Good Friday.

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
3'002	3'006	3'010	3'014	3'018	3'022	3'026	3'030	3'034	3'038	3'042	3'046	3'050
3'054	3'058	3'062	3'066	3'070	3'074	3'078	3'082	3'086	3'090	3'094	3'098	3'102
3'106	3'110	3'114	3'118	3'122	3'126	3'130	3'134	3'138	3'142	3'146	3'150	3'154
3'158	3'162	3'166	3'170	3'174	3'178	3'182	3'186	3'190	3'194	3'198	3'202	3'206
3'210	3'214	3'218	3'222	3'226	3'230	3'234	3'238	3'242	3'246	3'250	3'254	3'258
3'262	3'266	3'270	3'274	3'278	3'282	3'286	3'290	3'294	3'298	3'302	3'306	3'310
3'314	3'318	3'322	3'326	3'330	3'334	3'338	3'342	3'346	3'350	3'354	3'358	3'362
3'366	3'370	3'374	3'378	3'382	3'386	3'390	3'394	3'398	3'402	3'406	3'410	3'414
3'418	3'422	3'426	3'430	3'434	3'438	3'442	3'446	3'450	3'454	3'458	3'462	3'466
3'470	3'474	3'478	3'482	3'486	3'490	3'494	3'498	3'502	3'506	3'510	3'514	3'518
3'522	3'526	3'530	3'534	3'538	3'542	3'546	3'550	3'554	3'558	3'562	3'566	3'570
3'574	3'578	3'582	3'586	3'590	3'594	3'598	3'602	3'606	3'610	3'614	3'618	3'622
3'626	3'630	3'634	3'638	3'642	3'646	3'650	3'654	3'658	3'662	3'666	3'670	3'674
3'678	3'682	3'686	3'690	3'694	3'698	3'702	3'706	3'710	3'714	3'718	3'722	3'726
3'730	3'734	3'738	3'742	3'746	3'750	3'754	3'758	3'762	3'766	3'770	3'774	3'778
3'782	3'786	3'790	3'794	3'798	3'802	3'806	3'810	3'814	3'818	3'822	3'826	3'830
3'834	3'838	3'842	3'846	3'850	3'854	3'858	3'862	3'866	3'870	3'874	3'878	3'882
3'886	3'890	3'894	3'898	3'902	3'906	3'910	3'914	3'918	3'922	3'926	3'930	3'934
3'938	3'942	3'946	3'950	3'954	3'958	3'962	3'966	3'970	3'974	3'978	3'982	3'986
3'990	3'994	3'998	4'002	4'006	4'010	4'014	4'018	4'022	4'026	4'030	4'034	4'038
4'042	4'046	4'050	4'054	4'058	4'062	4'066	4'070	4'074	4'078	4'082	4'086	4'090
4'094	4'098	4'102	4'106	4'110	4'114	4'118	4'122	4'126	4'130	4'134	4'138	4'142
4'146	4'150	4'154	4'158	4'162	4'166	4'170	4'174	4'178	4'182	4'186	4'190	4'194
4'198	4'202	4'206	4'210	4'214	4'218	4'222	4'226	4'230	4'234	4'238	4'242	4'246
4'250	4'254	4'258	4'262	4'266	4'270	4'274	4'278	4'282	4'286	4'290	4'294	4'298
4'302	4'306	4'310	4'314	4'318	4'322	4'326	4'330	4'334	4'338	4'342	4'346	4'350
4'354	4'358	4'362	4'366	4'370	4'374	4'378	4'382	4'386	4'390	4'394	4'398	4'402
4'406	4'410	4'414	4'418	4'422	4'426	4'430	4'434	4'438	4'442	4'446	4'450	4'454
4'458	4'462	4'466	4'470	4'474	4'478	4'482	4'486	4'490	4'494	4'498	4'502	4'506
4'510	4'514	4'518	4'522	4'526	4'530	4'534	4'538	4'542	4'546	4'550	4'554	4'558
4'562	4'566	4'570	4'574	4'578	4'582	4'586	4'590	4'594	4'598	4'602	4'606	4'610
4'614	4'618	4'622	4'626	4'630	4'634	4'638	4'642	4'646	4'650	4'654	4'658	4'662
4'666	4'670	4'674	4'678	4'682	4'686	4'690	4'694	4'698	4'702	4'706	4'710	4'714
4'718	4'722	4'726	4'730	4'734	4'738	4'742	4'746	4'750	4'754	4'758	4'762	4'766
4'770	4'774	4'778	4'782	4'786	4'790	4'794	4'798	4'802	4'806	4'810	4'814	4'818
4'822	4'826	4'830	4'834	4'838	4'842	4'846	4'850	4'854	4'858	4'862	4'866	4'870
4'874	4'878	4'882	4'886	4'890	4'894	4'898	4'902	4'906	4'910	4'914	4'918	4'922
4'926	4'930	4'934	4'938	4'942	4'946	4'950	4'954	4'958	4'962	4'966	4'970	4'974
4'978	4'982	4'986	4'990	4'994	4'998	5'002	5'006	5'010	5'014	5'018	5'022	5'026
5'030	5'034	5'038	5'042	5'046	5'050	5'054	5'058	5'062	5'066	5'070	5'074	5'078
5'082	5'086	5'090	5'094	5'098	5'102	5'106	5'110	5'114	5'118	5'122	5'126	5'130
5'134	5'138	5'142	5'146	5'150	5'154	5'158	5'162	5'166	5'170	5'174	5'178	5'182
5'186	5'190	5'194	5'198	5'202	5'206	5'210	5'214	5'218	5'222	5'226	5'230	5'234
5'238	5'242	5'246	5'250	5'254	5'258	5'262	5'266	5'270	5'274	5'278	5'282	5'286
5'290	5'294	5'298	5'302	5'306	5'310	5'314	5'318	5'322	5'326	5'330	5'334	5'338
5'342	5'346	5'350	5'354	5'358	5'362	5'366	5'370	5'374	5'378	5'382	5'386	5'390
5'394	5'398	5'402	5'406	5'410	5'414	5'418	5'422	5'426	5'430	5'434	5'438	5'442
5'446	5'450	5'454	5'458	5'462	5'466	5'470	5'474	5'478	5'482	5'486	5'490	5'494
5'498	5'502	5'506	5'510	5'514	5'518	5'522	5'526	5'530	5'534	5'538	5'542	5'546
5'550	5'554	5'558	5'562	5'566	5'570	5'574	5'578	5'582	5'586	5'590	5'594	5'598
5'602	5'606	5'610	5'614	5'618	5'622	5'626	5'630	5'634	5'638	5'642	5'646	5'650
5'654	5'658	5'662	5'666	5'670	5'674	5'678	5'682	5'686	5'690	5'694	5'698	5'702
5'706	5'710	5'714	5'718	5'722	5'726	5'730	5'734	5'738	5'742	5'746	5'750	5'754
5'758	5'762	5'766	5'770	5'774	5'778	5'782	5'786	5'790	5'794	5'798	5'802	5'806
5'810	5'814	5'818	5'822	5'826	5'830	5'834	5'838	5'842	5'846	5'850	5'854	5'858
5'862	5'866	5'870	5'874	5'878	5'882	5'886	5'890	5'894	5'898	5'902	5'906	5'910
5'914	5'918	5'922	5'926	5'930	5'934	5'938	5'942	5'946	5'950	5'954	5'958	5'962
5'966	5'970	5'974	5'978	5'982	5'986	5'990	5'994	5'998	6'002	6'006	6'010	6'014
6'018	6'022	6'026	6'030	6'034	6'038	6'042	6'046	6'050	6'054	6'058	6'062	6'066
6'070	6'074	6'078	6'082	6'086	6'090	6'094	6'098	6'102	6'106	6'110	6'114	6'118
6'122	6'126	6'130	6'134	6'138	6'142	6'146	6'150	6'154	6'158	6'162	6'166	6'170
6'174	6'178	6'182	6'186	6'190	6'194	6'198	6'202	6'206	6'210	6'214	6'218	6'222
6'226	6'230	6'234	6'238	6'242	6'246	6'250	6'254	6'258	6'262	6'266	6'270	6'274
6'278	6'282	6'286	6'290	6'294	6'298	6'302	6'306	6'310	6'314	6'318	6'322	6'326
6'330	6'334	6'338	6'342	6'346	6'350	6'354	6'358	6'362	6'366	6'370	6'374	6'378
6'382	6'386	6'390	6'394	6'398	6'402	6'406	6'410	6'414	6'418	6'422	6'426	6'430
6'434	6'438	6'442	6'446	6'450	6'454	6'458	6'462	6'466	6'470	6'474	6'478	6'482
6'486	6'490	6'494	6'498	6'502	6'506	6'510	6'514	6'518	6'522	6'526	6'530	6'534
6'538	6'542	6'546	6'550	6'554	6'558	6'562	6'566	6'570	6'574	6'578	6'582	6'586
6'590	6'594	6'598	6'602	6'606	6'610	6'614	6'618	6'622	6'626	6'630	6'634	6'638
6'642	6'646	6'650	6'654	6'658	6'662	6'666	6'670	6'674	6'678	6'682	6'686	6'690
6'694	6'698	6'702	6'706	6'710	6'714	6'718	6'722	6'726	6'730	6'734	6'738	6'742
6'746	6'750	6'754	6'758	6'762	6'766	6'770	6'774	6'778	6'782	6'786	6'790	6'794
6'798	6'802	6'806	6'810	6'814	6'818	6'822	6'826	6'830	6'834	6'838	6'842	6'846
6'850	6'854	6'858	6'862	6'866	6'870	6'874	6'878	6'882	6'886	6'890	6'894	6'898
6'902	6'906	6'910	6'914	6'918	6'922	6'926	6'930	6'934	6'938	6'942	6'946	6'950
6'954	6'958	6'962	6'966	6'970	6'974	6'978	6'982	6'986	6'990	6'994	6'998	7'002
7'006	7'010	7'014	7'018	7'022	7'026	7'030	7'034	7'038	7'042	7'046	7'050	7'054
7'058	7'062	7'066	7'070	7'074	7'078	7'082	7'086	7'090	7'094	7'098	7'102	7'106
7'110	7'114	7'118	7'122	7'126	7'130	7'134	7'138	7'142	7'146	7'150	7'154	7'158
7'162	7'166	7'170	7'174	7'178	7'182	7'186	7'190	7'194	7'198	7'202	7'206	7'210
7'214	7'218	7'222	7'226	7'230	7'234	7'238	7'242	7'246	7'250	7'254	7'258	7'262
7'266	7'270	7'274	7'278	7'282	7'286	7'290	7'294	7'298	7'302	7'306	7'310	7'314
7'318	7'322	7'326	7'330	7'334	7'338	7'342	7'346	7'350	7'354	7'358	7'362	7'366
7'370	7'374	7'378	7'382	7'386	7'390	7'394	7'398	7'402	7'406	7'410	7'414	7'418
7'422	7'426	7'430	7'434	7'438	7'442	7'446	7'450	7'454	7'458	7'462	7'466	7'470
7'474	7'478	7'482	7'486	7'490	7'494	7'498	7'502	7'506	7'510	7'514	7'518	7'522
7'526	7'530	7'534	7'538	7'542	7'546	7'550	7'554	7'558	7'562	7'566	7'570	7'574
7'578	7'582	7'586	7'590	7'5								

BAROMETRIC PRESSURE.											
Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4
MAY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1 2'310	2'314	2'319	2'327	2'317	2'301	2'300	2'294	2'280	2'286	2'290
	2 2'340	2'348	2'350	2'350	2'349	2'359	2'365	2'381	2'382	2'384	2'408
	3 —	—	—	—	—	—	—	—	—	—	—
	4 2'696	2'720	2'718	2'731	2'725	2'720	2'713	2'683	2'666	2'659	2'641
	5 2'645	2'653	2'635	2'627	2'629	2'638	2'624	2'634	2'614	2'589	2'585
	6 2'578	2'594	2'600	2'630	2'637	2'659	2'659	2'646	2'644	2'624	2'622
	7 2'615	2'624	2'628	2'622	2'636	2'625	2'620	2'601	2'601	2'583	2'582
	8 2'612	2'620	2'634	2'629	2'626	2'623	2'612	2'618	2'592	2'582	2'579
	9 2'429	2'429	2'413	2'385	2'375	2'357	2'343	2'294	2'270	2'252	2'234
	10 —	—	—	—	—	—	—	—	—	—	—
	11 2'404	2'433	2'455	2'464	2'465	2'450	2'442	2'436	2'423	2'409	2'408
	12 2'397	2'400	2'404	2'402	2'400	2'401	2'403	2'405	2'414	2'407	2'410
	13 2'379	2'353	2'347	2'339	2'329	2'310	2'290	2'269	2'267	2'264	2'292
	14 2'410	2'406	2'428	2'419	2'413	2'388	2'356	2'306	2'380	2'323	2'321
	15 2'359	2'383	2'461	2'492	2'554	2'600	2'627	2'645	2'668	2'680	2'681
	16 2'819	2'825	2'823	2'819	2'808	2'826	2'810	2'802	2'787	2'794	2'789
	17 —	—	—	—	—	—	—	—	—	—	—
	18 2'605	2'602	2'643	2'664	2'677	2'693	2'712	2'725	2'735	2'742	2'765
	19 2'840	2'853	2'862	2'848	2'834	2'803	2'781	2'749	2'721	2'687	2'652
	20 2'508	2'491	2'483	2'452	2'432	2'420	2'396	2'419	2'401	2'401	2'402
	21 2'740	2'762	2'775	2'791	2'796	2'818	2'820	2'782	2'780	2'789	2'763
	22 2'836	2'844	2'841	2'836	2'834	2'815	2'797	2'790	2'786	2'757	2'749
	23 2'557	2'553	2'542	2'545	2'544	2'543	2'541	2'538	2'550	2'561	2'578
	24 —	—	—	—	—	—	—	—	—	—	—
	25 2'644	2'645	2'650	2'643	2'642	2'648	2'638	2'621	2'616	2'616	2'610
	26 2'551	2'554	2'552	2'548	2'539	2'514	2'501	2'480	2'476	2'439	2'440
	27 2'275	2'282	2'265	2'270	2'271	2'268	2'279	2'283	2'276	2'284	2'283
	28 2'291	2'291	2'289	2'273	2'268	2'260	2'258	2'251	2'235	2'225	2'217
	29 2'330	2'325	2'325	2'323	2'324	2'318	2'314	2'308	2'283	2'271	2'275
	30 2'207	2'213	2'215	2'225	2'225	2'221	2'210	2'207	2'201	2'195	2'201
	31 —	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'5145	2'5200	2'5253	2'5252	2'5250	2'5222	2'5155	2'5100	2'5018	2'4924	2'4914
JUNE.	1 2'483	2'492	2'465	2'461	2'425	2'449	2'441	2'420	2'382	2'390	2'366
	2 2'370	2'370	2'409	2'427	2'415	2'408	2'401	2'355	2'367	2'357	2'355
	3 2'517	2'531	2'531	2'518	2'528	2'474	2'477	2'461	2'457	2'433	2'418
	4 2'432	2'428	2'446	2'420	2'409	2'399	2'376	2'357	2'323	2'313	2'307
	5 2'319	2'325	2'340	2'344	2'351	2'335	2'325	2'335	2'338	2'342	2'338
	6 2'480	2'486	2'504	2'512	2'532	2'541	2'549	2'559	2'579	2'592	2'591
	7 —	—	—	—	—	—	—	—	—	—	—
	8 2'932	2'952	2'958	2'971	2'990	2'982	2'981	2'971	2'962	2'955	2'948
	9 3'045	3'037	3'041	3'011	3'041	3'041	3'023	3'006	2'978	2'951	2'926
	10 2'782	2'782	2'772	2'756	2'726	2'715	2'685	2'662	2'621	2'605	2'591
	11 2'547	2'563	2'583	2'585	2'590	2'605	2'620	2'621	2'609	2'585	2'563
	12 2'859	2'867	2'880	2'904	2'914	2'908	2'899	2'903	2'899	2'899	2'881
	13 2'867	2'873	2'872	2'866	2'877	2'874	2'869	2'849	2'835	2'818	2'804
	14 —	—	—	—	—	—	—	—	—	—	—
	15 2'552	2'558	2'560	2'561	2'545	2'544	2'531	2'522	2'517	2'507	2'503
	16 2'628	2'643	2'648	2'619	2'648	2'660	2'660	2'658	2'650	2'637	2'613
	17 2'638	2'649	2'654	2'654	2'661	2'650	2'633	2'630	2'616	2'603	2'601
	18 2'573	2'576	2'560	2'551	2'550	2'536	2'503	2'485	2'465	2'465	2'431
	19 2'333	2'335	2'327	2'317	2'309	2'275	2'271	2'256	2'248	2'241	2'218
	20 2'376	2'376	2'392	2'401	2'417	2'420	2'426	2'443	2'451	2'469	2'478
	21 —	—	—	—	—	—	—	—	—	—	—
	22 2'683	2'681	2'685	2'681	2'683	2'688	2'681	2'680	2'695	2'708	2'723
	23 2'825	2'836	2'826	2'821	2'807	2'792	2'775	2'775	2'769	2'756	2'753
	24 2'804	2'818	2'821	2'823	2'821	2'812	2'801	2'796	2'770	2'755	2'739
	25 2'723	2'730	2'722	2'710	2'704	2'693	2'674	2'658	2'647	2'643	2'625
	26 2'598	2'598	2'582	2'566	2'560	2'555	2'550	2'547	2'532	2'511	2'506
	27 2'501	2'515	2'517	2'517	2'519	2'516	2'515	2'525	2'512	2'502	2'508
	28 —	—	—	—	—	—	—	—	—	—	—
	29 2'551	2'553	2'553	2'559	2'557	2'561	2'556	2'546	2'522	2'509	2'519
	30 2'517	2'522	2'524	2'529	2'539	2'542	2'542	2'528	2'522	2'511	2'506
Hourly Means	2'6129	2'6191	2'6220	2'6209	2'6199	2'6144	2'6063	2'5988	2'5872	2'5791	2'5747

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'286	2'290	2'294	2'300	2'304	2'304	2'308	2'326	2'320	2'308	2'298	2'302	2'302	2'304	2'316	2'3052
2'384	2'408	2'418	2'426	2'446	2'460	2'472	2'482	2'480	—	2'636	2'637	2'614	2'617	2'661	2'4631
—	—	—	—	—	—	—	—	—	2'636	2'637	2'614	2'617	2'661	2'689	2'4631
2'659	2'641	2'636	2'635	2'635	2'643	2'644	2'641	2'638	2'614	2'625	2'620	2'622	2'616	2'645	2'6632
2'589	2'585	2'570	2'549	2'547	2'559	2'561	2'530	2'539	2'527	2'514	2'510	2'511	2'534	2'561	2'5788
2'624	2'622	2'611	2'617	2'612	2'612	2'628	2'630	2'633	2'623	2'612	2'599	2'592	2'604	2'598	2'6191
2'583	2'582	2'588	2'586	2'587	2'587	2'589	2'589	2'597	2'596	2'590	2'586	2'582	2'586	2'584	2'5993
2'582	2'579	2'570	2'517	2'511	2'543	2'532	2'534	2'523	2'497	2'476	2'461	2'461	2'441	2'421	2'5545
2'252	2'234	—	2'208	2'214	2'210	2'202	2'189	2'177	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	2'351	2'362	2'363	2'374	2'376	2'382	2'3089
2'409	2'408	2'409	2'407	2'407	2'418	2'402	2'393	2'383	2'368	2'361	2'357	2'355	2'349	2'385	2'4076
2'407	2'410	2'417	2'436	2'440	2'442	2'466	2'451	2'446	2'444	2'422	2'414	2'403	2'392	2'386	2'4168
2'264	2'292	2'317	2'325	2'337	2'339	2'349	2'371	2'373	2'370	2'380	2'380	2'382	2'386	2'396	2'3393
2'323	2'321	2'280	2'283	2'303	2'319	2'323	2'332	2'356	2'366	2'349	2'357	2'337	2'329	2'322	2'3544
2'680	2'681	2'701	2'728	2'742	2'745	2'759	2'744	2'767	2'784	2'776	2'777	2'771	2'772	2'815	2'6681
2'794	2'789	2'790	2'786	2'786	2'798	2'801	2'805	2'791	—	2'639	2'605	2'602	2'596	2'591	2'7538
—	—	—	—	—	—	—	—	—	2'820	2'827	2'816	2'809	2'804	2'811	2'7511
2'742	2'765	2'781	2'782	2'782	2'793	2'799	2'818	2'820	2'827	2'816	2'809	2'804	2'811	2'821	2'7511
2'687	2'692	2'697	2'694	2'629	2'627	2'618	2'556	2'552	2'567	2'551	2'538	2'517	2'507	2'514	2'6703
2'401	2'402	2'411	2'436	2'468	2'499	2'515	2'524	2'550	2'554	2'587	2'620	2'655	2'681	2'707	2'5002
2'789	2'763	2'769	2'771	2'758	2'768	2'776	2'768	2'763	2'776	2'778	2'778	2'779	2'783	2'821	2'7782
2'737	2'749	2'759	2'734	2'691	2'680	2'682	2'655	2'638	2'638	2'636	2'624	2'587	2'593	2'565	2'7223
2'561	2'578	2'588	2'596	2'614	2'628	2'642	2'644	2'644	—	2'596	2'602	2'610	2'616	2'643	2'5866
—	—	—	2'690	2'596	2'582	2'578	2'578	2'574	2'567	2'570	2'558	2'546	2'536	2'561	2'6013
2'616	2'610	2'612	2'642	2'613	2'583	2'561	2'544	2'530	2'514	2'298	2'291	2'288	2'269	2'273	2'4197
2'439	2'440	2'442	2'442	2'443	2'483	2'501	2'504	2'506	2'511	2'297	2'288	2'288	2'290	2'281	2'2850
2'284	2'283	2'288	2'284	2'283	2'283	2'289	2'290	2'290	2'297	2'288	2'288	2'290	2'281	2'290	2'2850
2'225	2'217	2'217	2'232	2'236	2'261	2'267	2'275	2'288	2'260	2'290	2'294	2'300	2'299	2'320	2'2657
2'271	2'275	2'276	2'255	2'262	2'252	2'254	2'240	2'247	2'227	2'241	2'203	2'199	2'201	2'192	2'2682
2'195	2'201	2'210	2'211	2'237	2'241	2'285	2'309	2'317	—	2'500	2'488	2'482	2'476	2'477	2'2932
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2'4921	2'4914	2'491	2'490	2'4964	2'5000	2'5056	2'5013	2'5018	2'5106	2'5058	2'5027	2'4998	2'5000	2'5114	2'5067
2'390	2'366	2'344	2'358	2'342	2'339	2'347	2'339	2'339	2'346	2'338	2'340	2'340	2'353	2'358	2'3847
2'357	2'355	2'357	2'351	2'340	2'342	2'346	2'343	2'341	2'342	2'347	2'342	2'345	2'348	2'347	2'4221
2'433	2'418	2'418	2'399	2'395	2'391	2'417	2'409	2'419	2'433	2'446	2'439	2'434	2'434	2'438	2'4513
2'313	2'307	2'308	2'295	2'295	2'304	2'328	2'323	2'315	2'313	2'300	2'298	2'292	2'309	2'321	2'3411
2'342	2'366	2'378	2'373	2'375	2'412	2'407	2'415	2'424	2'426	2'427	2'438	2'437	2'445	2'459	2'3810
2'592	2'591	2'593	2'616	2'625	2'653	2'675	2'687	2'694	—	2'830	2'837	2'841	2'847	2'871	2'6507
—	—	—	—	—	—	—	—	—	2'830	2'837	2'841	2'847	2'871	2'918	—
2'955	2'948	2'961	2'971	2'953	2'959	2'970	2'982	2'987	2'996	2'987	2'988	2'991	2'991	3'027	2'9722
2'951	2'926	2'937	2'881	2'874	2'864	2'837	2'836	2'825	2'812	2'825	2'817	2'806	2'793	2'786	2'9169
2'605	2'591	2'596	2'571	2'558	2'521	2'544	2'551	2'545	2'545	2'524	2'528	2'534	2'531	2'543	2'6124
2'585	2'593	2'596	2'605	2'617	2'627	2'657	2'694	2'708	2'737	2'762	2'777	2'792	2'820	2'838	2'6561
2'899	2'881	2'871	2'868	2'874	2'865	2'879	2'885	2'882	2'882	2'875	2'865	2'862	2'867	2'867	2'8815
2'818	2'804	2'778	2'766	2'763	2'761	2'760	2'751	2'735	—	2'516	2'538	2'526	2'520	2'526	2'7466
—	—	—	—	—	—	—	—	—	2'516	2'538	2'526	2'520	2'526	2'544	—
2'507	2'503	2'493	2'498	2'508	2'511	2'539	2'550	2'559	2'569	2'592	2'590	2'590	2'595	2'612	2'5462
2'637	2'637	2'643	2'646	2'646	2'641	2'612	2'616	2'624	2'627	2'621	2'615	2'619	2'615	2'629	2'6311
2'603	2'601	2'596	2'594	2'586	2'590	2'595	2'592	2'585	2'579	2'571	2'572	2'568	2'562	2'572	2'6082
2'465	2'434	2'409	2'399	2'408	2'403	2'415	2'422	2'440	2'392	2'387	2'375	2'356	2'357	2'351	2'4490
2'241	2'248	2'252	2'274	2'298	2'303	2'320	2'302	2'309	2'322	2'333	2'333	2'334	2'355	2'366	2'3025
2'469	2'478	2'487	2'465	2'499	2'496	2'498	2'498	2'500	—	2'651	2'653	2'655	2'661	2'668	2'5039
—	—	—	—	—	—	—	—	—	2'829	2'797	2'789	2'785	2'788	2'813	2'7435
2'708	2'723	2'734	2'765	2'765	2'764	2'777	2'779	2'776	2'770	2'771	2'774	2'769	2'774	2'793	2'7818
2'756	2'755	2'753	2'713	2'721	2'719	2'735	2'731	2'722	2'726	2'720	2'703	2'704	2'699	2'725	2'7540
2'755	2'739	2'716	2'643	2'613	2'613	2'609	2'614	2'608	2'605	2'583	2'570	2'567	2'569	2'603	2'6384
2'643	2'635	2'626	2'511	2'506	2'497	2'487	2'500	2'495	2'491	2'491	2'486	2'484	2'486	2'490	2'5207
2'502	2'508	2'506	2'502	2'499	2'493	2'483	2'501	2'512	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	2'518	2'515	2'513	2'509	2'522	2'535	2'5113
2'509	2'519	2'507	2'493	2'513	2'515	2'521	2'511	2'509	2'508	2'507	2'507	2'500	2'502	2'511	2'5254
2'511	2'506	2'489	2'508	2'497	2'499	2'506	2'504	2'507	2'506	2'512	2'490	2'485	2'496	2'508	2'5114
2'5791	2'5747	2'564	2'568	2'5702	2'5734	2'5874	2'5863	2'5870	2'5939	2'5916	2'5888	2'5874	2'5930	2'6085	2'5939

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'497	2'497	2'500	2'505	2'509	2'514	2'501	2'486	2'473	2'459	2'473	2'471
2	2'608	2'628	2'639	2'659	2'659	2'652	2'647	2'645	2'648	2'642	2'632	2'626
3	2'723	2'745	2'745	2'725	2'720	2'707	2'695	2'667	2'649	2'642	2'636	2'609
4	2'547	2'541	2'540	2'526	2'527	2'513	2'498	2'471	2'442	2'427	2'402	2'410
5	—	—	—	—	—	—	—	—	—	—	—	—
6	2'426	2'435	2'434	2'438	2'452	2'449	2'445	2'444	2'426	2'433	2'426	2'409
7	2'574	2'585	2'593	2'607	2'611	2'610	2'602	2'600	2'583	2'568	2'562	2'559
8	2'564	2'558	2'575	2'564	2'568	2'534	2'516	2'507	2'487	2'483	2'469	2'464
9	2'515	2'522	2'523	2'547	2'544	2'594	2'618	2'494	2'494	2'496	2'478	2'459
10	2'494	2'495	2'504	2'502	2'507	2'493	2'485	2'492	2'475	2'457	2'457	2'439
11	2'478	2'482	2'473	2'467	2'456	2'449	2'434	2'433	2'453	2'445	2'438	2'426
12	—	—	—	—	—	—	—	—	—	—	—	—
13	2'595	2'603	2'595	2'572	2'573	2'544	2'538	2'518	2'513	2'510	2'481	2'461
14	2'607	2'614	2'643	2'641	2'641	2'647	2'647	2'645	2'649	2'666	2'676	2'692
15	2'824	2'831	2'838	2'834	2'841	2'841	2'829	2'834	2'834	2'838	2'833	2'847
16	2'930	2'945	2'956	2'962	2'973	2'975	2'965	2'949	2'944	2'945	2'933	2'916
17	3'006	3'027	3'024	3'017	3'020	3'011	2'986	2'978	2'959	2'947	2'946	2'908
18	2'909	2'921	2'915	2'917	2'914	2'905	2'891	2'880	2'867	2'858	2'853	2'841
19	—	—	—	—	—	—	—	—	—	—	—	—
20	2'576	2'582	2'587	2'575	2'584	2'585	2'574	2'561	2'546	2'538	2'531	2'531
21	2'602	2'612	2'610	2'610	2'611	2'610	2'599	2'594	2'589	2'581	2'577	2'572
22	2'585	2'597	2'593	2'584	2'557	2'569	2'568	2'550	2'549	2'537	2'534	2'533
23	2'492	2'501	2'492	2'471	2'460	2'456	2'438	2'431	2'425	2'406	2'388	2'362
24	2'300	2'310	2'308	2'284	2'282	2'258	2'275	2'291	2'305	2'319	2'319	2'332
25	2'592	2'608	2'619	2'625	2'653	2'638	2'633	2'615	2'644	2'643	2'630	2'626
26	—	—	—	—	—	—	—	—	—	—	—	—
27	2'773	2'793	2'793	2'792	2'782	2'785	2'779	2'781	2'765	2'750	2'739	2'717
28	2'646	2'644	2'639	2'649	2'641	2'631	2'610	2'584	2'562	2'541	2'543	2'513
29	2'463	2'446	2'450	2'478	2'447	2'436	2'434	2'429	2'401	2'403	2'416	2'369
30	2'322	2'322	2'309	2'316	2'311	2'313	2'304	2'296	2'293	2'296	2'319	2'318
31	2'548	2'546	2'550	2'559	2'570	2'598	2'594	2'592	2'590	2'588	2'590	2'587
Hourly Means	2'5999	2'6067	2'6093	2'6084	2'6079	2'6043	2'5965	2'5851	2'5765	2'5711	2'5678	2'5588
AUGUST.	1	2'663	2'682	2'693	2'700	2'700	2'697	2'691	2'685	2'682	2'670	2'678
2	—	—	—	—	—	—	—	—	—	—	—	—
3	2'797	2'803	2'808	2'818	2'835	2'812	2'805	2'791	2'758	2'739	2'727	2'733
4	2'729	2'733	2'728	2'722	2'697	2'685	2'673	2'653	2'647	2'628	2'609	2'611
5	2'646	2'646	2'636	2'613	2'641	2'631	2'609	2'582	2'563	2'547	2'534	2'542
6	2'642	2'657	2'664	2'671	2'681	2'688	2'685	2'675	2'675	2'667	2'664	2'671
7	2'780	2'793	2'789	2'795	2'793	2'785	2'775	2'771	2'762	2'750	2'739	2'727
8	2'691	2'683	2'711	2'735	2'699	2'681	2'655	2'650	2'641	2'616	2'608	2'588
9	—	—	—	—	—	—	—	—	—	—	—	—
10	2'527	2'533	2'543	2'557	2'567	2'586	2'580	2'565	2'559	2'546	2'544	2'516
11	2'699	2'714	2'719	2'739	2'740	2'709	2'700	2'691	2'670	2'664	2'649	2'637
12	2'615	2'619	2'612	2'598	2'591	2'573	2'554	2'532	2'512	2'503	2'486	2'480
13	2'491	2'503	2'502	2'506	2'512	2'509	2'544	2'488	2'487	2'477	2'473	2'467
14	2'520	2'534	2'536	2'542	2'553	2'540	2'528	2'528	2'503	2'486	2'476	2'478
15	2'462	2'464	2'464	2'480	2'468	2'459	2'444	2'421	2'392	2'367	2'354	2'320
16	—	—	—	—	—	—	—	—	—	—	—	—
17	2'407	2'419	2'435	2'448	2'465	2'472	2'482	2'482	2'486	2'486	2'494	2'508
18	2'733	2'743	2'745	2'771	2'775	2'775	2'765	2'763	2'769	2'757	2'751	2'718
19	2'807	2'811	2'815	2'817	2'814	2'809	2'802	2'791	2'773	2'763	2'759	2'741
20	2'625	2'634	2'636	2'634	2'631	2'627	2'628	2'597	2'605	2'583	2'589	2'579
21	2'583	2'576	2'609	2'617	2'627	2'625	2'612	2'612	2'617	2'595	2'585	2'568
22	2'550	2'570	2'572	2'575	2'565	2'558	2'548	2'531	2'531	2'521	2'513	2'504
23	—	—	—	—	—	—	—	—	—	—	—	—
24	2'792	2'800	2'819	2'827	2'844	2'841	2'820	2'819	2'811	2'799	2'777	2'783
25	2'787	2'787	2'800	2'804	2'807	2'801	2'788	2'771	2'753	2'745	2'727	2'734
26	2'711	2'723	2'739	2'726	2'723	2'721	2'712	2'693	2'680	2'670	2'668	2'678
27	2'717	2'727	2'732	2'750	2'767	2'759	2'758	2'754	2'753	2'731	2'716	2'729
28	2'767	2'776	2'776	2'786	2'789	2'789	2'786	2'739	2'718	2'713	2'709	2'705
29	2'691	2'695	2'687	2'687	2'668	2'663	2'648	2'657	2'658	2'622	2'616	2'610
30	—	—	—	—	—	—	—	—	—	—	—	—
31	2'611	2'641	2'642	2'642	2'635	2'625	2'611	2'608	2'596	2'577	2'573	2'567
Hourly Means	2'6555	2'6641	2'6697	2'6765	2'6760	2'6700	2'6601	2'6480	2'6385	2'6239	2'6171	2'6128

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
4	5	6	7	8	9	10	11	12	13	14	15	16	17	17	In.
59	2'473	2'471	2'473	2'474	2'473	2'486	2'494	2'496	2'497	2'513	2'527	2'538	2'565	2'592	2'6001
542	2'632	2'626	2'633	2'642	2'672	2'659	2'666	2'675	2'684	2'690	2'684	2'684	2'697	2'6541	2'6541
542	2'636	2'609	2'603	2'591	2'582	2'606	2'599	2'583	2'563	2'560	2'555	2'560	2'560	2'550	2'6323
427	2'402	2'410	2'408	2'396	2'392	2'439	2'445	2'438	—	—	—	—	—	—	—
433	2'426	2'409	2'415	2'445	2'452	2'474	2'490	2'498	2'505	2'506	2'508	2'519	2'518	2'555	2'4626
568	2'562	2'559	2'565	2'567	2'570	2'587	2'589	2'582	2'565	2'568	2'565	2'561	2'559	2'563	2'5790
483	2'469	2'464	2'459	2'471	2'463	2'492	2'494	2'497	2'487	2'490	2'492	2'497	2'506	2'504	2'5059
496	2'478	2'459	2'450	2'430	2'442	2'446	2'448	2'452	2'447	2'455	2'469	2'471	2'488	2'494	2'4907
457	2'457	2'439	2'441	2'474	2'498	2'547	2'534	2'527	2'524	2'517	2'485	2'487	2'491	2'483	2'4942
445	2'438	2'426	2'428	2'428	2'429	2'450	2'446	2'432	—	—	—	—	—	—	—
510	2'481	2'461	2'453	2'457	2'483	2'502	2'514	2'531	2'546	2'538	2'548	2'551	2'562	2'592	2'4752
566	2'676	2'692	2'707	2'717	2'717	2'721	2'729	2'732	2'735	2'765	2'769	2'789	2'815	2'808	2'5314
838	2'833	2'847	2'861	2'863	2'861	2'887	2'890	2'899	2'899	2'902	2'904	2'908	2'925	2'932	2'6988
945	2'953	2'946	2'940	2'936	2'932	2'916	2'921	2'956	2'951	2'951	2'950	2'958	2'975	2'997	2'8647
947	2'946	2'908	2'902	2'896	2'909	2'921	2'913	2'915	2'912	2'898	2'895	2'878	2'889	2'901	2'9556
858	2'853	2'841	2'849	2'843	2'841	2'842	2'842	2'858	—	—	—	—	—	—	2'9441
538	2'531	2'531	2'535	2'536	2'544	2'561	2'569	2'578	2'579	2'563	2'551	2'551	2'548	2'570	2'7946
581	2'577	2'572	2'584	2'566	2'575	2'589	2'589	2'586	2'590	2'572	2'577	2'588	2'576	2'583	2'5642
537	2'534	2'533	2'505	2'506	2'515	2'508	2'518	2'511	2'509	2'486	2'467	2'465	2'445	2'465	2'5884
406	2'388	2'362	2'350	2'364	2'356	2'362	2'359	2'358	2'347	2'338	2'318	2'308	2'293	2'298	2'5274
319	2'349	2'362	2'392	2'418	2'448	2'460	2'483	2'497	2'513	2'526	2'535	2'543	2'546	2'578	2'3905
643	2'630	2'626	2'634	2'642	2'648	2'678	2'695	2'699	—	—	—	—	—	—	2'3992
750	2'739	2'717	2'697	2'693	2'691	2'707	2'702	2'704	2'695	2'741	2'742	2'740	2'738	2'739	2'6665
544	2'543	2'543	2'525	2'525	2'511	2'515	2'520	2'526	2'501	2'688	2'685	2'678	2'662	2'648	2'7444
403	2'416	2'389	2'364	2'366	2'385	2'373	2'343	2'345	2'333	2'497	2'464	2'426	2'464	2'472	2'7291
296	2'319	2'318	2'332	2'348	2'381	2'398	2'405	2'414	2'415	2'313	2'303	2'304	2'317	2'321	2'5492
588	2'590	2'587	2'601	2'617	2'626	2'635	2'635	2'642	2'638	2'439	2'438	2'448	2'455	2'502	2'3850
5711	2'5678	2'5588	2'5600	2'5631	2'5691	2'5853	2'5872	2'5890	2'5783	2'5783	2'5766	2'5774	2'5831	2'5941	2'3615
670	2'677	2'678	2'678	2'678	2'681	2'704	2'709	2'709	—	—	—	—	—	—	2'6063
739	2'727	2'733	2'725	2'725	2'733	2'733	2'734	2'734	2'758	2'754	2'746	2'740	2'770	2'774	2'7946
628	2'609	2'611	2'603	2'609	2'611	2'614	2'629	2'631	2'734	2'729	2'713	2'713	2'719	2'735	2'7563
547	2'534	2'542	2'545	2'545	2'561	2'581	2'586	2'584	2'623	2'631	2'636	2'631	2'625	2'634	2'6497
567	2'664	2'671	2'677	2'678	2'697	2'712	2'723	2'728	2'593	2'590	2'596	2'597	2'606	2'614	2'5924
750	2'739	2'727	2'727	2'727	2'726	2'736	2'736	2'737	2'733	2'735	2'737	2'736	2'730	2'755	2'6950
616	2'608	2'588	2'588	2'588	2'590	2'598	2'598	2'597	2'727	2'697	2'699	2'698	2'683	2'673	2'7420
746	2'544	2'546	2'560	2'560	2'595	2'604	2'612	2'629	2'488	2'470	2'471	2'472	2'490	2'505	2'5986
564	2'649	2'637	2'631	2'616	2'584	2'618	2'609	2'611	2'639	2'646	2'651	2'653	2'654	2'675	2'5888
503	2'486	2'480	2'482	2'476	2'478	2'478	2'481	2'475	2'606	2'601	2'598	2'604	2'598	2'608	2'6506
477	2'473	2'467	2'467	2'467	2'479	2'492	2'505	2'522	2'471	2'474	2'478	2'472	2'468	2'479	2'5165
486	2'476	2'478	2'466	2'470	2'467	2'483	2'479	2'480	2'498	2'494	2'492	2'492	2'497	2'498	2'4933
467	2'354	2'320	2'328	2'326	2'342	2'333	2'339	2'344	2'459	2'459	2'400	2'439	2'448	2'456	2'4893
486	2'494	2'508	2'516	2'516	2'550	2'582	2'583	2'591	2'358	2'353	2'351	2'351	2'366	2'395	2'3867
757	2'751	2'748	2'748	2'748	2'772	2'773	2'777	2'791	2'615	2'632	2'652	2'673	2'689	2'709	2'5357
763	2'759	2'711	2'719	2'721	2'715	2'717	2'715	2'701	2'615	2'632	2'652	2'673	2'689	2'709	2'7706
583	2'589	2'579	2'576	2'579	2'579	2'593	2'603	2'591	2'695	2'667	2'650	2'640	2'632	2'626	2'7375
595	2'585	2'568	2'564	2'564	2'569	2'563	2'565	2'564	2'589	2'578	2'574	2'563	2'564	2'569	2'5969
521	2'513	2'504	2'494	2'484	2'509	2'511	2'511	2'501	2'563	2'558	2'559	2'551	2'548	2'550	2'5810
799	2'783	2'783	2'781	2'773	2'764	2'783	2'785	2'790	2'670	2'702	2'722	2'733	2'747	2'761	2'5785
745	2'734	2'734	2'732	2'714	2'714	2'739	2'737	2'715	2'792	2'790	2'779	2'775	2'772	2'775	2'7960
570	2'668	2'678	2'668	2'666	2'676	2'683	2'685	2'684	2'713	2'705	2'705	2'700	2'696	2'698	2'7452
731	2'716	2'729	2'731	2'724	2'741	2'746	2'746	2'744	2'679	2'672	2'674	2'670	2'671	2'689	2'6892
713	2'709	2'705	2'713	2'709	2'703	2'703	2'707	2'694	2'754	2'754	2'741	2'749	2'745	2'757	2'7423
522	2'616	2'610	2'602	2'605	2'600	2'604	2'606	2'601	2'686	2'684	2'702	2'689	2'697	2'684	2'7260
77	2'673	2'567	2'567	2'573	2'586	2'595	2'596	2'606	2'596	2'598	2'604	2'605	2'604	2'608	2'6306
239	2'6171	2'6128	2'6111	2'6076	2'6162	2'6257	2'6282	2'6267	2'596	2'598	2'604	2'605	2'604	2'608	2'6018
			2'6111	2'6076	2'6162	2'6257	2'6282	2'6267	2'6329	2'6302	2'6282	2'6285	2'6312	2'6383	2'6382

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'605	2'620	2'624	2'627	2'643	2'630	2'595	2'591	2'590	2'578	2'584	2'587
2	2'647	2'656	2'652	2'646	2'646	2'638	2'619	2'601	2'592	2'568	2'573	2'564
3	2'513	2'514	2'508	2'516	2'508	2'510	2'500	2'479	2'453	2'419	2'423	2'408
4	2'387	2'403	2'405	2'395	2'398	2'374	2'358	2'354	2'292	2'321	2'322	2'317
5	2'476	2'486	2'496	2'518	2'529	2'525	2'533	2'536	2'546	2'557	2'575	2'589
6	—	—	—	—	—	—	—	—	—	—	—	—
7	2'675	2'685	2'690	2'685	2'679	2'671	2'645	2'622	2'578	2'575	2'567	2'575
8	2'713	2'725	2'729	2'739	2'743	2'748	2'733	2'733	2'725	2'723	2'723	2'733
9	2'902	2'921	2'929	2'943	2'942	2'955	2'931	2'905	2'881	2'876	2'862	2'866
10	2'923	2'927	2'927	2'920	2'927	2'919	2'903	2'901	2'893	2'874	2'866	2'846
11	2'805	2'807	2'794	2'789	2'774	2'764	2'753	2'729	2'700	2'686	2'675	2'667
12	2'609	2'605	2'610	2'608	2'599	2'584	2'574	2'579	2'563	2'565	2'551	2'543
13	—	—	—	—	—	—	—	—	—	—	—	—
14	2'510	2'506	2'490	2'478	2'457	2'440	2'440	2'459	2'387	2'366	2'360	2'358
15	2'633	2'665	2'695	2'717	2'729	2'732	2'714	2'688	2'672	2'674	2'672	2'660
16	2'810	2'851	2'827	2'811	2'805	2'797	2'772	2'754	2'720	2'701	2'678	2'671
17	2'577	2'571	2'565	2'560	2'542	2'530	2'516	2'511	2'494	2'506	2'498	2'490
18	2'460	2'484	2'490	2'499	2'531	2'535	2'550	2'548	2'541	2'546	2'555	2'563
19	2'674	2'687	2'696	2'724	2'735	2'737	2'736	2'743	2'751	2'718	2'728	2'733
20	—	—	—	—	—	—	—	—	—	—	—	—
21	2'721	2'759	2'774	2'812	2'834	2'834	2'824	2'798	2'778	2'785	2'783	2'787
22	2'847	2'848	2'850	2'850	2'857	2'841	2'826	2'805	2'786	2'790	2'769	2'758
23	2'672	2'665	2'653	2'653	2'641	2'634	2'618	2'594	2'558	2'545	2'543	2'528
24	2'599	2'641	2'609	2'646	2'648	2'611	2'619	2'627	2'629	2'629	2'635	2'649
25	2'685	2'666	2'643	2'593	2'553	2'513	2'471	2'451	2'419	2'361	2'331	2'270
26	2'524	2'539	2'539	2'556	2'570	2'573	2'563	2'542	2'529	2'519	2'511	2'513
27	—	—	—	—	—	—	—	—	—	—	—	—
28	2'874	2'862	2'878	2'876	2'893	2'861	2'846	2'833	2'823	2'799	2'793	2'789
29	2'762	2'740	2'736	2'719	2'699	2'681	2'641	2'639	2'627	2'626	2'604	2'590
30	2'437	2'441	2'433	2'420	2'413	2'398	2'375	2'352	2'324	2'310	2'312	2'326
Hourly Means	2'6554	2'6644	2'6632	2'6654	2'6652	2'6552	2'6406	2'6298	2'6089	2'6007	2'5959	2'5915
OCTOBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'475	2'491	2'518	2'543	2'543	2'555	2'549	2'547	2'535	2'533	2'529	2'505
2	2'434	2'470	2'471	2'505	2'525	2'541	2'546	2'545	2'557	2'587	2'587	2'607
3	2'732	2'766	2'766	2'765	2'776	2'747	2'732	2'726	2'686	2'675	2'671	2'658
4	—	—	—	—	—	—	—	—	—	—	—	—
5	2'670	2'675	2'680	2'684	2'683	2'690	2'688	2'676	2'679	2'675	2'687	2'711
6	2'845	2'869	2'875	2'868	2'847	2'835	2'801	2'772	2'742	2'733	2'707	2'699
7	2'687	2'699	2'701	2'700	2'689	2'670	2'654	2'638	2'651	2'658	2'655	2'657
8	2'875	2'903	2'919	2'925	2'926	2'944	2'954	2'938	2'936	2'940	2'922	2'919
9	2'852	2'854	2'836	2'808	2'802	2'811	2'801	2'789	2'823	2'838	2'859	2'894
10	3'104	3'132	3'139	3'148	3'151	3'155	3'156	3'156	3'140	3'134	3'108	3'113
11	—	—	—	—	—	—	—	—	—	—	—	—
12	2'682	2'690	2'677	2'665	2'638	2'635	2'607	2'582	2'552	2'538	2'535	2'541
13	2'468	2'444	2'424	2'388	2'336	2'288	2'235	2'182	2'117	2'038	2'020	1'968
14	2'403	2'417	2'434	2'445	2'447	2'450	2'441	2'432	2'422	2'414	2'409	2'393
15	2'495	2'519	2'535	2'570	2'590	2'601	2'602	2'611	2'613	2'618	2'623	2'633
16	2'507	2'489	2'465	2'457	2'435	2'434	2'407	2'375	2'346	2'422	2'425	2'433
17	2'922	2'941	2'865	2'843	2'852	2'856	2'851	2'831	2'816	2'818	2'829	2'837
18	—	—	—	—	—	—	—	—	—	—	—	—
19	2'772	2'783	2'785	2'787	2'776	2'762	2'746	2'751	2'750	2'739	2'736	2'712
20	2'604	2'604	2'604	2'598	2'600	2'589	2'585	2'574	2'585	2'607	2'618	2'619
21	2'764	2'768	2'798	2'796	2'794	2'787	2'769	2'765	2'756	2'760	2'756	2'754
22	2'587	2'581	2'557	2'538	2'538	2'587	2'609	2'638	2'674	2'726	2'780	2'810
23	2'712	2'712	2'693	2'639	2'559	2'507	2'445	2'351	2'358	2'336	2'346	2'364
24	2'464	2'476	2'516	2'528	2'531	2'541	2'556	2'564	2'598	2'625	2'647	2'694
25	—	—	—	—	—	—	—	—	—	—	—	—
26	2'845	2'833	2'823	2'818	2'806	2'767	2'724	2'652	2'613	2'592	2'571	2'523
27	2'295	2'327	2'358	2'402	2'416	2'439	2'443	2'453	2'457	2'483	2'503	2'526
28	2'796	2'809	2'825	2'825	2'826	2'810	2'778	2'757	2'735	2'722	2'719	2'704
29	2'607	2'643	2'655	2'642	2'652	2'656	2'661	2'649	2'653	2'683	2'702	2'734
30	2'975	3'000	3'031	3'049	3'063	3'076	3'091	3'099	3'103	3'125	3'129	3'144
31	3'186	3'192	3'192	3'199	3'175	3'166	3'148	3'118	3'098	3'086	3'059	3'009
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6947	2'7070	2'7097	2'7087	2'7028	2'6996	2'6881	2'6730	2'6665	2'6706	2'6716	2'6737

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
578	2'584	2'587
568	2'573	2'564
549	2'423	2'408
521	2'322	2'317
557	2'575	2'589
575	2'567	2'575
723	2'723	2'733
876	2'862	2'866
874	2'866	2'846
686	2'675	2'667
565	2'551	2'543
366	2'360	2'358
674	2'672	2'660
701	2'678	2'671
506	2'498	2'490
546	2'555	2'563
718	2'728	2'733
785	2'783	2'787
790	2'769	2'758
545	2'543	2'528
629	2'635	2'649
361	2'331	2'270
519	2'511	2'513
799	2'793	2'789
626	2'604	2'590
310	2'312	2'326
6007	2'5959	2'5915
533	2'529	2'505
587	2'587	2'607
675	2'671	2'658
675	2'687	2'711
733	2'707	2'689
658	2'655	2'637
940	2'922	2'919
838	2'859	2'894
134	3'108	3'113
538	2'535	2'541
038	2'020	1'968
414	2'409	2'393
618	2'623	2'633
422	2'425	2'433
818	2'829	2'837
739	2'736	2'712
607	2'618	2'619
760	2'756	2'754
726	2'780	2'810
336	2'346	2'364
625	2'647	2'694
592	2'571	2'523
483	2'503	2'526
722	2'719	2'704
683	2'702	2'734
125	3'129	3'144
086	3'059	3'009
6706	2'6716	2'6737

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'593	2'613	2'632	2'624	2'627	2'634	2'633	2'630	2'624	2'628	2'628	2'624	2'6152
2'547	2'537	2'542	2'546	2'533	2'537	2'531	2'530	2'512	2'510	2'498	2'482	2'5711
2'410	2'405	2'408	2'408	2'390	2'382	2'374	2'325	2'329	2'341	2'347	2'375	2'4269
2'314	2'344	2'354	2'357	2'371	2'385	2'386	2'394	2'404	2'412	2'418	2'452	2'3715
2'611	2'638	2'675	2'719	2'732	2'736	—	—	—	—	—	—	2'6105
—	—	—	—	—	—	2'711	2'707	2'703	2'699	2'684	2'671	2'6407
2'567	2'596	2'622	2'633	2'632	2'646	2'653	2'652	2'668	2'679	2'684	2'697	2'7691
2'740	2'765	2'782	2'783	2'789	2'810	2'810	2'826	2'829	2'839	2'847	2'872	2'8919
2'856	2'849	2'857	2'861	2'867	2'867	2'868	2'880	2'888	2'889	2'889	2'919	2'8669
2'834	2'820	2'820	—	2'811	2'829	2'822	2'841	2'839	2'843	2'841	2'813	2'6818
2'651	2'639	2'629	2'637	2'641	2'643	2'630	2'596	2'584	2'582	2'595	2'593	2'5589
2'551	2'545	2'543	2'537	2'531	2'540	—	—	—	—	—	—	2'4371
—	—	—	—	—	—	2'533	2'541	2'538	2'524	2'520	2'521	2'7102
2'356	2'376	2'412	2'391	2'391	2'399	2'409	2'430	2'443	2'506	2'534	2'593	2'6959
2'675	2'696	2'708	2'714	2'714	2'722	2'723	2'749	2'745	2'760	2'780	2'809	2'4924
2'667	2'659	2'663	2'642	2'636	2'624	2'607	2'622	2'610	2'598	2'590	2'586	2'5715
2'477	2'477	2'477	2'487	2'463	2'454	2'462	2'438	2'434	2'426	2'431	2'432	2'660
2'583	2'573	2'599	2'604	2'614	2'621	2'632	2'625	2'630	2'630	2'643	2'660	2'6772
2'717	2'708	2'718	2'717	2'720	2'721	—	—	—	—	—	—	2'661
—	—	—	—	—	—	2'487	2'495	2'511	2'555	2'600	2'661	2'7982
2'789	2'793	2'794	2'819	2'812	2'806	2'809	2'808	2'793	2'797	2'810	2'837	2'7699
2'755	2'753	2'753	2'729	2'730	2'720	2'715	2'733	2'729	2'683	2'687	2'664	2'5819
2'527	2'555	2'562	2'543	2'552	2'554	2'562	2'554	2'553	2'565	2'557	2'577	2'6732
2'668	2'698	2'727	2'743	2'752	2'748	2'743	2'726	2'718	2'710	2'693	2'690	2'4383
2'266	2'246	2'312	2'323	2'346	2'368	2'382	2'430	2'454	2'456	2'480	2'500	2'5838
2'501	2'499	2'493	2'495	2'488	2'489	—	—	—	—	—	—	2'772
—	—	—	—	—	—	2'722	2'736	2'751	2'755	2'781	2'824	2'8118
2'785	2'791	2'789	2'797	2'771	2'776	2'772	2'784	2'781	2'775	2'772	2'764	2'5991
2'566	2'578	2'565	2'564	2'555	2'532	2'542	2'506	2'489	2'481	2'473	2'463	2'3817
2'342	2'352	2'374	2'362	2'370	2'374	2'382	2'387	2'404	2'412	2'418	2'444	2'6237
2'5903	2'5963	2'6081	2'6014	2'6092	2'6122	2'6115	2'6133	2'6139	2'6175	2'6231	2'6355	2'6237
2'503	2'504	2'513	2'500	2'498	2'474	2'496	2'503	2'469	2'463	2'445	2'434	2'5052
2'623	2'641	2'659	2'685	2'694	2'698	2'706	2'713	2'711	2'708	2'708	2'726	2'6103
2'649	2'645	2'649	2'635	2'641	2'642	—	—	—	—	—	—	2'6838
2'711	2'743	2'769	2'793	2'816	2'813	2'823	2'834	2'846	2'853	2'843	2'834	2'7448
2'691	2'689	2'693	2'665	2'673	2'661	2'666	2'672	2'673	2'671	2'669	2'687	2'7576
2'627	2'709	2'719	2'715	2'705	2'767	2'787	2'775	2'770	2'814	2'828	2'849	2'7177
2'928	2'904	2'890	2'910	2'908	2'902	2'878	2'844	2'844	2'838	2'831	2'844	2'9010
2'926	2'938	2'982	3'021	3'029	3'035	3'036	3'038	3'049	3'062	3'076	3'084	2'9268
3'117	3'113	3'104	3'100	3'118	3'122	—	—	—	—	—	—	3'0301
—	—	—	—	—	—	2'777	2'763	2'747	2'721	2'716	2'688	2'5750
2'547	2'559	2'559	2'552	2'574	2'571	2'549	2'540	2'532	2'500	2'494	2'480	2'2227
2'000	2'033	2'085	2'108	2'146	2'184	2'225	2'283	2'304	2'320	2'343	2'377	2'4259
2'405	2'400	2'409	2'425	2'423	2'412	2'408	2'415	2'427	2'447	2'459	2'485	2'6194
2'644	2'660	2'672	2'659	2'680	2'662	2'663	2'667	2'678	2'653	2'635	2'563	2'5323
2'458	2'460	2'536	2'579	2'619	2'656	2'626	2'620	2'702	2'745	2'792	2'787	2'8263
2'843	2'844	2'834	2'822	2'820	2'816	—	—	—	—	—	—	2'772
—	—	—	—	—	—	2'770	2'764	2'764	2'764	2'758	2'720	2'7189
2'716	2'716	2'714	2'700	2'699	2'680	2'678	2'670	2'660	2'654	2'648	2'620	2'6583
2'648	2'665	2'667	2'706	2'716	2'721	2'735	2'750	2'750	2'750	2'740	2'764	2'7537
2'770	2'793	2'772	2'779	2'765	2'783	2'760	2'752	2'712	2'676	2'644	2'710	2'7336
2'841	2'860	2'866	2'878	2'880	2'864	2'859	2'831	2'804	2'798	2'771	2'730	2'4534
2'370	2'386	2'380	2'399	2'403	2'411	2'413	2'405	2'407	2'422	2'410	2'454	2'6915
2'710	2'732	2'752	2'748	2'771	2'771	—	—	—	—	—	—	2'5555
—	—	—	—	—	—	2'921	2'914	2'898	2'894	2'874	2'871	2'5588
2'512	2'488	2'462	2'450	2'430	2'420	2'404	2'358	2'337	2'313	2'295	2'295	2'7190
2'566	2'600	2'606	2'657	2'671	2'691	2'707	2'746	2'752	2'759	2'773	2'790	2'7605
2'698	2'686	2'681	2'682	2'689	2'689	2'671	2'649	2'633	2'625	2'621	2'616	2'957
2'758	2'792	2'804	2'834	2'846	2'863	2'877	2'877	2'894	2'904	2'908	2'937	3'1303
3'156	3'171	3'185	3'180	3'184	3'192	3'193	3'198	3'201	3'193	3'198	3'191	2'9997
3'017	3'025	3'018	3'028	3'029	3'023	—	—	—	—	—	—	2'6960
—	—	—	—	—	—	2'734	2'724	2'709	2'690	2'677	2'690	2'6960
2'6853	2'6947	2'7030	2'7119	2'7206	2'7231	2'7041	2'7018	2'7004	2'6990	2'6961	2'6983	2'6960

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2	2'680	2'680	2'687	2'677	2'694	2'684	2'674	2'667	2'660	2'646	2'656	2'680
3	2'786	2'800	2'820	2'818	2'828	2'827	2'805	2'791	2'799	2'798	2'778	2'783
4	2'920	2'950	2'970	3'004	3'013	3'034	3'024	3'035	3'023	3'031	3'047	3'071
5	3'148	3'174	3'192	3'206	3'200	3'192	3'178	3'173	3'153	3'147	3'136	3'127
6	3'070	3'058	3'082	3'090	3'070	3'065	3'053	3'022	3'009	3'002	2'999	2'979
7	2'962	2'950	2'950	2'939	2'929	2'931	2'912	2'904	2'886	2'883	2'868	2'860
8	—	—	—	—	—	—	—	—	—	—	—	—
9	2'639	2'657	2'663	2'684	2'682	2'688	2'681	2'683	2'678	2'690	2'690	2'718
10	2'758	2'754	2'782	2'776	2'770	2'741	2'733	2'719	2'693	2'677	2'695	2'691
11	2'648	2'670	2'686	2'700	2'714	2'712	2'718	2'724	2'717	2'735	2'747	2'773
12	2'874	2'902	2'910	2'926	2'930	2'930	2'917	2'894	2'886	2'884	2'886	2'878
13	2'858	2'866	2'868	2'862	2'857	2'845	2'819	2'807	2'793	2'785	2'783	2'780
14	2'736	2'752	2'759	2'761	2'753	2'739	2'731	2'712	2'692	2'694	2'696	2'700
15	—	—	—	—	—	—	—	—	—	—	—	—
16	2'812	2'834	2'847	2'854	2'867	2'865	2'857	2'879	2'867	2'878	2'878	2'892
17	2'827	2'817	2'817	2'811	2'793	2'770	2'746	2'736	2'722	2'696	2'670	2'650
18	2'569	2'569	2'581	2'589	2'596	2'586	2'581	2'573	2'595	2'590	2'609	2'616
19	2'466	2'451	2'403	2'351	2'339	2'269	2'191	2'188	2'075	2'073	2'058	2'050
20	2'295	2'319	2'337	2'367	2'397	2'410	2'411	2'411	2'441	2'464	2'466	2'476
21	2'501	2'510	2'512	2'509	2'503	2'494	2'466	2'459	2'415	2'403	2'391	2'383
22	—	—	—	—	—	—	—	—	—	—	—	—
23	2'499	2'531	2'539	2'591	2'604	2'617	2'613	2'631	2'621	2'604	2'600	2'583
24	2'378	2'386	2'396	2'400	2'397	2'395	2'385	2'375	2'379	2'385	2'378	2'373
25	2'261	2'259	2'256	2'258	2'241	2'184	2'172	2'153	2'156	2'168	2'184	2'197
26	2'214	2'223	2'233	2'242	2'238	2'212	2'199	2'192	2'188	2'213	2'232	2'250
27	2'560	2'554	2'568	2'578	2'572	2'548	2'521	2'497	2'467	2'439	2'429	2'395
28	2'350	2'366	2'394	2'437	2'475	2'483	2'498	2'506	2'514	2'521	2'525	2'535
29	—	—	—	—	—	—	—	—	—	—	—	—
30	3'030	3'036	3'052	3'073	3'081	3'065	3'067	3'041	3'027	3'039	3'051	3'061
Hourly Means	2'6736	2'6827	2'6922	2'7001	2'7005	2'6914	2'6785	2'6709	2'6582	2'6578	2'6581	2'6600
DECEMBER.	1	3'097	3'111	3'097	3'086	3'085	3'046	3'020	2'992	2'974	2'955	2'940
2	2'582	2'558	2'534	2'492	2'481	2'436	2'402	2'375	2'358	2'347	2'317	2'292
3	2'299	2'312	2'331	2'348	2'354	2'353	2'345	2'369	2'375	2'401	2'405	2'435
4	2'686	2'700	2'721	2'761	2'776	2'776	2'788	2'808	2'830	2'853	2'877	2'919
5	3'125	3'125	3'129	3'153	3'159	3'143	3'124	3'108	3'008	3'092	3'091	3'096
6	—	—	—	—	—	—	—	—	—	—	—	—
7	2'731	2'721	2'768	2'632	2'611	2'547	2'507	2'486	2'440	2'434	2'416	2'390
8	2'297	2'312	2'340	2'358	2'378	2'359	2'367	2'363	2'364	2'381	2'394	2'421
9	2'579	2'603	2'619	2'676	2'719	2'705	2'708	2'726	2'742	2'746	2'746	2'749
10	2'566	2'554	2'462	2'422	2'401	2'358	2'320	2'306	2'306	2'305	2'301	2'303
11	2'556	2'584	2'616	2'636	2'656	2'659	2'658	2'664	2'677	2'696	2'712	2'698
12	2'877	2'889	2'905	2'922	2'945	2'929	2'907	2'905	2'871	2'871	2'857	2'859
13	—	—	—	—	—	—	—	—	—	—	—	—
14	2'924	2'931	2'959	2'984	2'983	2'960	2'940	2'926	2'920	2'926	2'936	2'936
15	2'893	2'900	2'920	2'922	2'920	2'906	2'872	2'857	2'841	2'842	2'839	2'844
16	2'795	2'789	2'778	2'781	2'790	2'753	2'732	2'728	2'697	2'686	2'671	2'654
17	2'544	2'538	2'545	2'563	2'590	2'556	2'553	2'543	2'523	2'509	2'493	2'485
18	2'388	2'382	2'372	2'340	2'304	2'257	2'215	2'196	2'178	2'158	2'153	2'134
19	2'028	2'039	2'055	2'075	2'094	2'083	2'081	2'090	2'112	2'144	2'170	2'186
20	—	—	—	—	—	—	—	—	—	—	—	—
21	2'545	2'613	2'677	2'732	2'790	2'808	2'794	2'802	2'822	2'835	2'856	2'869
22	2'796	2'802	2'829	2'860	2'880	2'902	2'898	2'912	2'932	2'964	2'998	3'039
23	3'159	3'180	3'198	3'218	3'238	3'226	3'202	3'198	3'190	3'186	3'184	3'148
24	2'873	2'841	2'811	2'800	2'759	2'711	2'660	2'654	2'596	2'584	2'582	2'564
25*	—	—	—	—	—	—	—	—	—	—	—	—
26	2'895	2'903	2'900	2'905	2'888	2'859	2'780	2'743	2'685	2'639	2'603	2'542
27	—	—	—	—	—	—	—	—	—	—	—	—
28	2'181	2'177	2'217	2'231	2'232	2'236	2'246	2'245	2'277	2'339	2'381	2'436
29	2'884	2'902	2'925	2'908	2'896	2'890	2'868	2'868	2'830	2'804	2'787	2'750
30	2'244	2'254	2'275	2'291	2'334	2'340	2'361	2'355	2'401	2'453	2'494	2'533
31	2'577	2'587	2'553	2'566	2'554	2'503	2'459	2'443	2'435	2'440	2'410	2'406
Hourly Means	2'6585	2'6657	2'6745	2'6793	2'6853	2'6654	2'6464	2'6408	2'6332	2'6381	2'6390	2'6388

* Christmas Day.

BAROMETRIC PRESSURE.
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
'646	'656	'680	'655	'655	'669	'690	'688	'699	'719	'742	'754	'766	'792	'780	'6951
'798	'778	'783	'787	'793	'805	'826	'830	'835	'847	'851	'855	'872	'891	'908	'8222
'031	'047	'071	'071	'093	'091	'106	'115	'118	'134	'119	'123	'132	'132	'144	'0625
'147	'136	'127	'134	'115	'099	'088	'077	'065	'058	'064	'068	'070	'061	'072	'1249
'002	'999	'979	'977	'979	'977	'982	'987	'967	'968	'950	'936	'940	'940	'957	'0024
'883	'868	'860	'850	'848	'845	'821	'815	'797							
									'634	'631	'618	'611	'610	'630	'8202
'690	'690	'718	'730	'734	'742	'750	'750	'756	'761	'757	'758	'756	'756	'758	'7152
'677	'695	'691	'691	'693	'675	'675	'646	'642	'646	'622	'630	'622	'622	'629	'6909
'735	'747	'773	'796	'808	'808	'820	'836	'838	'836	'811	'819	'819	'819	'855	'7722
'884	'886	'878	'880	'886	'886	'889	'889	'875	'865	'875	'853	'853	'853	'857	'8866
'785	'783	'780	'782	'782	'781	'785	'768	'764	'754	'752	'752	'750	'746	'732	'7946
'694	'696	'700	'700	'690	'670	'675	'677	'676							
									'780	'772	'784	'792	'803	'800	'7310
'878	'878	'892	'906	'906	'898	'890	'882	'870	'866	'857	'855	'845	'831	'833	'8658
'696	'670	'650	'642	'638	'608	'608	'590	'580	'564	'566	'567	'566	'562	'561	'6711
'590	'609	'616	'608	'626	'631	'629	'609	'598	'598	'580	'554	'554	'547	'540	'5811
'073	'058	'050	'021	'019	'007	'005	'041	'066	'092	'126	'132	'178	'213	'271	'1715
'464	'466	'476	'502	'496	'498	'506	'506	'513	'505	'493	'479	'482	'490	'490	'2485
'403	'391	'383	'390	'365	'307	'289	'271	'277							
									'338	'372	'388	'411	'433	'469	'24107
'604	'600	'583	'563	'549	'537	'521	'514	'496	'472	'444	'426	'411	'400	'380	'5311
'385	'378	'373	'385	'382	'386	'364	'346	'328	'321	'301	'301	'291	'263	'263	'5566
'168	'184	'197	'201	'201	'201	'201	'195	'185	'190	'192	'196	'202	'204	'204	'2013
'213	'232	'250	'258	'286	'300	'308	'334	'358	'376	'450	'484	'512	'538	'542	'3076
'439	'429	'395	'367	'373	'364	'359	'356	'334	'337	'326	'338	'331	'327	'329	'24279
'521	'525	'535	'553	'565	'571	'560	'552	'564							
									'952	'969	'973	'002	'010	'004	'6200
'039	'051	'061	'085	'098	'103	'104	'102	'102	'102	'102	'098	'095	'095	'095	'30752
'6578	'6581	'6600	'6614	'6632	'6584	'6580	'6550	'6521	'6687	'6702	'6708	'6741	'6768	'6817	'6714
'955	'940	'922	'924	'886	'878	'851	'802	'772	'741	'735	'733	'700	'674	'627	'9020
'347	'317	'262	'236	'222	'217	'229	'215	'217	'224	'251	'249	'254	'280	'274	'2338
'401	'405	'435	'463	'480	'492	'540	'583	'597	'620	'624	'631	'639	'647	'655	'24707
'853	'877	'919	'939	'965	'983	'979	'992	'013	'017	'047	'053	'074	'090	'103	'9062
'092	'091	'096	'092	'098	'092	'102	'110	'106							
									'919	'878	'852	'819	'780		'30435
'434	'416	'390	'372	'341	'305	'251	'217	'184	'157	'167	'181	'200	'236	'265	'3983
'381	'394	'421	'409	'423	'418	'408	'398	'418	'430	'428	'459	'477	'531	'557	'24037
'746	'746	'749	'783	'780	'770	'752	'744	'757	'728	'712	'691	'663	'616	'608	'27042
'305	'301	'303	'313	'323	'337	'337	'353	'368	'372	'404	'426	'472	'494	'529	'3888
'696	'712	'698	'709	'714	'736	'762	'778	'780	'790	'819	'837	'857	'841	'861	'27198
'871	'857	'859	'869	'847	'849	'853	'851	'851							
									'932	'934	'942	'939	'939	'925	'28945
'926	'936	'936	'944	'944	'940	'945	'931	'922	'912	'910	'910	'904	'909	'893	'9329
'842	'839	'844	'846	'873	'873	'863	'853	'846	'840	'846	'811	'817	'801	'802	'28582
'686	'671	'654	'636	'624	'620	'598	'572	'560	'546	'550	'550	'550	'559	'542	'26567
'509	'493	'485	'489	'483	'473	'465	'463	'443	'424	'396	'407	'399	'391	'390	'24860
'158	'153	'134	'119	'112	'096	'078	'048	'044	'036	'044	'036	'032	'032	'020	'21572
'144	'170	'186	'200	'219	'227	'231	'274	'282							
									'400	'360	'382	'407	'457	'495	'21134
'835	'836	'869	'877	'885	'887	'887	'890	'866	'853	'809	'799	'781	'779	'784	'28017
'964	'998	'039	'048	'060	'067	'059	'069	'069	'067	'085	'091	'119	'135	'146	'29928
'186	'184	'148	'155	'157	'146	'126	'097	'069	'035	'021	'011	'992	'978	'897	'31255
'584	'582	'564	'562	'545	'522	'506	'496	'494							
									'800	'826	'854	'860	'848	'887	'26931
'639	'603	'542	'499	'467	'437	'382	'345	'312							
									'190	'190	'195	'203	'187	'189	'25391
'339	'381	'436	'492	'549	'584	'650	'679	'684	'751	'785	'819	'843	'847	'863	'24893
'804	'787	'750	'738	'682	'612	'566	'500	'440	'414	'376	'360	'326	'302	'252	'26617
'453	'494	'533	'534	'580	'584	'608	'610	'610	'597	'616	'623	'597	'589	'557	'24767
'440	'410	'436	'443	'427	'408	'406	'399	'399	'400	'366	'392	'386	'402	'472	'24526
'6381	'6390	'6388	'6420	'6418	'6367	'6321	'6257	'6186	'6229	'6223	'6267	'6265	'6286	'6291	'6424

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hour of Mean Greenwich Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'507	2'510	2'546	2'582	2'628	2'608	2'594	2'588	2'581	2'598	2'604	2'571
2	2'472	2'490	2'530	2'581	2'606	2'621	2'622	2'612	2'646	2'667	2'681	2'692
3	—	—	—	—	—	—	—	—	—	—	—	—
4	2'813	2'748	2'713	2'656	2'621	2'552	2'474	2'401	2'337	2'283	2'208	2'161
5	2'036	2'095	2'148	2'181	2'232	2'224	2'213	2'237	2'242	2'260	2'270	2'284
6	2'580	2'586	2'600	2'645	2'634	2'608	2'578	2'555	2'546	2'538	2'523	2'535
7	2'005	1'933	1'946	1'917	1'895	1'871	1'893	1'921	1'966	2'008	2'034	2'078
8	2'440	2'483	2'521	2'559	2'607	2'612	2'628	2'667	2'708	2'738	2'738	2'746
9	2'852	2'866	2'870	2'858	2'861	2'836	2'798	2'775	2'782	2'794	2'801	2'794
10	—	—	—	—	—	—	—	—	—	—	—	—
11	2'693	2'688	2'676	2'686	2'687	2'664	2'624	2'591	2'590	2'589	2'589	2'604
12	2'884	2'907	2'959	3'001	3'024	3'023	3'006	3'025	3'030	3'051	3'062	3'069
13	2'874	2'854	2'816	2'792	2'752	2'720	2'675	2'642	2'621	2'620	2'596	2'568
14	2'429	2'414	2'414	2'428	2'430	2'415	2'383	2'359	2'361	2'372	2'382	2'385
15	2'374	2'328	2'276	2'219	2'172	2'131	2'080	2'069	2'056	2'054	2'066	2'058
16	2'197	2'248	2'304	2'349	2'402	2'410	2'415	2'429	2'487	2'564	2'624	2'727
17	—	—	—	—	—	—	—	—	—	—	—	—
18	2'405	2'378	2'383	2'377	2'363	2'336	2'316	2'271	2'276	2'291	2'295	2'307
19	2'568	2'610	2'678	2'724	2'763	2'782	2'802	2'820	2'860	2'894	2'912	2'950
20	3'093	3'093	3'093	3'093	3'098	3'076	3'013	2'975	2'962	2'952	2'948	2'922
21	2'824	2'822	2'836	2'840	2'820	2'816	2'818	2'816	2'828	2'854	2'862	2'881
22	2'889	2'901	2'904	2'905	2'839	2'871	2'828	2'803	2'780	2'775	2'737	2'701
23	2'245	2'259	2'291	2'300	2'316	2'324	2'345	2'353	2'388	2'409	2'428	2'439
24	—	—	—	—	—	—	—	—	—	—	—	—
25	2'902	2'922	2'948	2'958	2'960	2'959	2'941	2'931	2'930	2'917	2'922	2'901
26	2'411	2'378	2'301	2'295	2'268	2'254	2'236	2'232	2'286	2'357	2'432	2'472
27	2'867	2'898	2'937	2'956	2'981	2'990	3'001	3'008	3'021	3'051	3'087	3'107
28	3'218	3'219	3'216	3'232	3'219	3'208	3'163	3'137	3'104	3'080	3'051	3'007
29	2'638	2'616	2'599	2'593	2'545	2'472	2'370	2'296	2'231	2'189	2'149	2'123
30	2'207	2'227	2'288	2'312	2'337	2'356	2'372	2'385	2'401	2'429	2'451	2'473
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'5932	2'5951	2'6075	2'6169	2'6179	2'6054	2'5887	2'5715	2'5761	2'5890	2'5943	2'5980
FEBRUARY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'371	2'406	2'428	2'445	2'473	2'483	2'499	2'498	2'521	2'539	2'548	2'543
2	2'531	2'521	2'520	2'517	2'501	2'488	2'458	2'449	2'431	2'435	2'425	2'411
3	2'098	2'057	2'017	1'959	1'907	1'857	1'803	1'747	1'734	1'721	1'732	1'744
4	2'322	2'362	2'406	2'491	2'529	2'545	2'550	2'552	2'561	2'591	2'625	2'647
5	2'736	2'742	2'747	2'755	2'744	2'742	2'722	2'713	2'711	2'705	2'684	2'680
6	2'747	2'762	2'779	2'789	2'802	2'788	2'758	2'734	2'725	2'729	2'732	2'726
7	—	—	—	—	—	—	—	—	—	—	—	—
8	2'257	2'273	2'284	2'282	2'275	2'252	2'240	2'224	2'188	2'175	2'167	2'131
9	2'159	2'223	2'258	2'294	2'321	2'336	2'342	2'340	2'350	2'364	2'378	2'404
10	2'451	2'465	2'486	2'507	2'497	2'507	2'491	2'488	2'493	2'514	2'534	2'553
11	2'630	2'637	2'644	2'662	2'661	2'649	2'633	2'633	2'637	2'637	2'639	2'639
12	2'471	2'471	2'485	2'501	2'531	2'545	2'544	2'537	2'556	2'591	2'621	2'665
13	2'734	2'738	2'741	2'724	2'698	2'687	2'652	2'625	2'599	2'595	2'593	2'591
14	—	—	—	—	—	—	—	—	—	—	—	—
15	2'505	2'563	2'631	2'673	2'724	2'776	2'800	2'808	2'836	2'874	2'906	2'901
16	2'919	2'903	2'903	2'865	2'838	2'801	2'733	2'664	2'614	2'570	2'540	2'517
17	2'677	2'694	2'712	2'745	2'745	2'768	2'760	2'755	2'757	2'756	2'769	2'763
18	2'893	2'893	2'919	2'931	2'925	2'905	2'888	2'854	2'821	2'820	2'800	2'792
19	2'768	2'780	2'821	2'845	2'842	2'870	2'876	2'873	2'876	2'885	2'913	2'907
20	2'986	3'005	3'015	3'024	3'022	3'026	3'012	3'001	2'989	2'987	2'987	2'995
21	—	—	—	—	—	—	—	—	—	—	—	—
22	2'452	2'452	2'458	2'472	2'472	2'466	2'463	2'472	2'488	2'505	2'527	2'572
23	2'894	2'945	2'975	3'007	3'019	3'036	3'026	3'017	3'019	3'017	3'036	3'042
24	3'083	3'093	3'093	3'100	3'091	3'081	3'056	3'015	2'985	2'978	2'944	2'938
25	2'816	2'834	2'838	2'846	2'872	2'867	2'872	2'862	2'854	2'863	2'882	2'897
26	2'995	2'991	2'990	3'012	2'994	2'973	2'924	2'906	2'891	2'864	2'837	2'813
27	2'355	2'301	2'229	2'217	2'167	2'073	1'954	1'925	1'866	1'838	1'818	1'818
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6187	2'6296	2'6420	2'6526	2'6521	2'6467	2'6273	2'6122	2'6043	2'6060	2'6092	2'6120

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
598	2'604	2'571
667	2'681	2'692
283	2'208	2'161
260	2'270	2'284
538	2'523	2'535
008	2'034	2'078
708	2'738	2'746
794	2'801	2'794
589	2'589	2'604
051	3'062	3'069
620	2'596	2'568
372	2'382	2'385
054	2'066	2'058
564	2'624	2'727
291	2'295	2'307
894	2'912	2'950
952	2'948	2'922
854	2'862	2'881
775	2'737	2'701
409	2'428	2'439
917	2'922	2'901
357	2'432	2'472
051	3'087	3'107
090	3'051	3'007
189	2'149	2'123
429	2'451	2'473
5890	2'5943	2'5983
539	2'518	2'543
435	2'425	2'411
721	1'732	1'744
591	2'625	2'617
705	2'684	2'680
729	2'732	2'726
75	2'167	2'131
364	2'378	2'404
514	2'534	2'553
337	2'623	2'639
591	2'621	2'665
595	2'593	2'591
474	2'906	2'901
570	2'540	2'517
756	2'769	2'763
820	2'800	2'792
885	2'913	2'907
779	2'987	2'995
505	2'527	2'572
117	3'036	3'042
778	2'944	2'938
663	2'882	2'897
64	2'837	2'813
38	1'818	1'818
060	2'6092	2'6120

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'599	2'479	2'401	2'310	2'306	2'313	2'289	2'316	2'342	2'365	2'395	2'426	2'4737
2'712	2'726	2'724	2'738	2'744	2'753	—	—	—	—	—	—	2'7062
—	—	—	—	—	—	2'937	2'919	2'916	2'887	2'851	2'822	—
2'096	2'056	1'989	1'883	1'858	1'840	1'862	1'914	1'934	1'952	1'968	2'002	2'2218
2'314	2'314	2'340	2'370	2'404	2'426	2'475	2'504	2'542	2'570	2'582	2'564	2'3261
2'327	2'497	2'457	2'393	2'381	2'324	2'275	2'230	2'172	2'141	2'107	2'039	2'4363
2'103	2'130	2'174	2'189	2'208	2'229	2'246	2'274	2'292	2'331	2'367	2'401	2'1035
2'760	2'774	2'796	2'818	2'830	2'829	2'833	2'831	2'843	2'848	2'832	2'842	2'7150
2'791	2'822	2'842	2'839	2'851	2'863	—	—	—	—	—	—	2'8067
—	—	—	—	—	—	2'769	2'757	2'749	2'743	2'740	2'707	—
2'613	2'640	2'656	2'680	2'730	2'746	—	2'771	2'803	2'825	2'851	2'863	2'6895
3'070	3'081	3'072	3'058	3'042	3'044	3'016	2'986	2'968	2'934	2'888	2'888	3'0037
2'546	2'530	2'506	2'468	2'454	2'460	2'448	2'455	2'453	2'465	2'461	2'429	2'5920
2'421	2'427	2'447	2'490	2'476	2'472	2'467	2'485	2'485	2'457	2'429	2'419	2'4270
2'074	2'070	2'022	2'038	2'058	2'052	2'044	2'078	2'099	2'108	2'120	2'160	2'1169
2'777	2'864	2'899	2'930	2'944	2'979	—	—	—	—	—	—	2'5780
—	—	—	—	—	—	2'649	2'602	2'592	2'546	2'498	2'436	—
2'327	2'337	2'350	2'356	2'371	2'393	2'375	2'388	2'431	2'458	2'476	2'494	2'3647
2'972	2'974	2'984	2'995	3'004	3'022	3'029	3'055	3'069	3'079	3'079	3'075	2'9042
2'919	2'917	2'905	2'905	2'887	2'865	2'849	2'835	2'830	2'810	2'820	2'822	2'9451
2'895	2'897	2'886	2'891	2'877	2'893	2'893	2'907	2'909	2'914	2'881	2'881	2'8654
2'661	2'614	2'563	2'543	2'519	2'465	2'435	2'363	2'339	2'311	2'285	2'243	2'6364
2'462	2'483	2'486	2'484	2'482	2'486	—	—	—	—	—	—	2'5072
—	—	—	—	—	—	2'841	2'853	2'863	2'867	2'882	2'888	—
2'896	2'894	2'864	2'839	2'811	2'766	2'736	2'692	2'658	2'626	2'537	2'481	2'8338
2'526	2'578	2'605	2'654	2'663	2'693	2'717	2'756	2'777	2'795	2'813	2'838	2'5142
3'145	3'154	3'181	3'205	3'208	3'220	3'248	3'252	3'272	3'258	3'227	3'200	3'1032
3'002	2'948	2'910	2'884	2'858	2'834	2'802	2'770	2'758	2'743	2'704	2'666	2'9893
2'097	2'079	2'055	2'033	2'025	2'029	2'035	2'010	2'063	2'099	2'141	2'173	2'2371
2'500	—	—	—	—	—	—	—	—	—	—	—	2'3911
—	—	—	—	—	—	2'337	2'335	2'335	2'347	2'354	2'356	—
2'6044	2'6073	2'6012	2'5963	2'5967	2'5971	2'5843	2'5911	2'5960	2'5954	2'5899	2'5813	2'5954
2'570	2'566	2'582	2'618	2'642	2'603	2'598	2'600	2'604	2'589	2'562	2'549	2'5349
2'394	2'390	2'374	2'369	2'369	2'356	2'328	2'308	2'302	2'280	2'247	2'210	2'3977
1'791	1'835	1'862	1'905	1'970	2'019	2'039	2'083	2'158	2'210	2'257	2'290	1'9498
2'675	2'695	2'707	2'715	2'721	2'719	2'724	2'707	2'709	2'722	2'716	2'732	2'6135
2'685	2'684	2'684	2'676	2'688	2'696	2'695	2'692	2'692	2'722	2'724	2'730	2'7104
2'716	2'694	2'688	2'639	2'709	2'713	—	—	—	—	—	—	2'6081
—	—	—	—	—	—	2'204	2'198	2'209	2'213	2'233	2'247	—
2'117	2'115	2'109	2'035	2'015	1'981	1'957	1'971	1'983	2'017	2'039	2'095	2'1326
2'426	2'426	2'432	2'441	2'443	2'455	2'443	2'445	2'447	2'454	2'442	2'449	2'3780
2'564	2'572	2'583	2'596	2'613	2'624	2'632	2'621	2'612	2'608	2'617	2'629	2'5524
2'645	2'639	2'627	2'595	2'575	2'553	2'541	2'530	2'528	2'502	2'493	2'470	2'5993
2'679	2'692	2'717	2'734	2'740	2'727	2'733	2'732	2'740	2'726	2'722	2'732	2'6330
2'603	2'609	2'638	2'645	2'632	2'620	—	—	—	—	—	—	2'5994
—	—	—	—	—	—	2'439	2'434	2'436	2'441	2'455	2'457	—
2'951	2'976	2'976	2'990	2'986	2'984	2'981	2'981	2'974	2'973	2'958	2'937	2'8610
2'495	2'480	2'464	2'470	2'482	2'486	2'506	2'512	2'552	2'580	2'596	2'615	2'6294
2'802	2'826	2'846	2'844	2'847	2'851	2'860	2'871	2'883	2'898	2'900	2'893	2'8022
2'774	2'760	2'771	2'774	2'774	2'772	2'772	2'754	2'748	2'742	2'746	2'768	2'8165
2'929	2'957	2'953	2'969	2'969	2'969	2'967	2'967	2'970	2'974	2'964	2'984	2'9095
2'994	2'985	2'979	2'987	2'990	2'932	—	—	—	—	—	—	2'8620
—	—	—	—	—	—	2'469	2'467	2'467	2'462	2'462	2'454	—
2'594	2'631	2'647	2'689	2'732	2'744	2'758	2'757	2'776	2'799	2'831	2'864	2'6092
3'050	3'058	3'074	3'065	3'058	3'062	3'066	3'073	3'070	3'067	3'073	3'085	3'0347
2'896	2'882	2'859	2'864	2'864	2'860	2'852	2'826	2'797	2'793	2'793	2'803	2'9394
2'902	2'928	2'932	2'947	2'953	2'964	2'965	2'973	2'981	2'982	2'982	3'005	2'9090
2'774	2'742	2'741	2'700	2'676	2'600	2'584	2'558	2'494	2'466	2'448	2'392	2'7652
1'826	1'828	1'822	1'825	1'828	1'831	—	—	—	—	—	—	2'0382
—	—	—	—	—	—	2'191	2'207	2'227	2'239	2'251	2'282	—
2'6188	2'6237	2'6278	2'6313	2'6365	2'6300	2'5960	2'5945	2'5983	2'6025	2'6046	2'6084	2'6202

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	In.	In.	In.	In.	2'442	In.	In.	In.	In.	In.	In.	In.
	1	2'313	2'329	2'394	2'428	2'479	2'486	2'492	2'491	2'501	2'520	2'539
	2	2'779	2'787	2'797	2'810	2'818	2'822	2'815	2'777	2'758	2'759	2'765
	3	2'730	2'731	2'739	2'702	2'680	2'667	2'646	2'636	2'615	2'609	2'593
	4	2'716	2'738	2'764	2'773	2'782	2'797	2'802	2'799	2'794	2'804	2'813
	5	2'969	3'008	3'024	3'026	3'033	3'046	3'026	3'012	3'015	3'002	3'000
	6	3'019	3'062	3'064	3'052	3'051	3'048	3'028	2'999	2'983	2'976	2'967
	7	—	—	—	—	—	—	—	—	—	—	—
	8	2'679	2'716	2'745	2'767	2'792	2'793	2'807	2'801	2'811	2'839	2'845
	9	2'984	2'982	2'988	2'973	2'977	2'959	2'959	2'901	2'885	2'873	2'859
	10	2'683	2'693	2'695	2'713	2'705	2'683	2'672	2'663	2'659	2'658	2'662
	11	2'891	2'923	2'905	2'896	2'890	2'864	2'855	2'824	2'816	2'804	2'791
	12	2'733	2'734	2'736	2'780	2'767	2'730	2'724	2'696	2'686	2'707	5'685
	13	2'694	2'714	2'724	2'740	2'727	2'728	2'722	2'686	2'673	2'668	2'667
	14	—	—	—	—	—	—	—	—	—	—	—
	15	2'742	2'755	2'763	2'752	2'750	2'703	2'712	2'732	2'716	2'718	2'718
	16	2'707	2'714	2'732	2'742	2'748	2'761	2'765	2'771	2'768	2'788	2'793
	17	2'965	3'002	3'008	3'003	3'004	2'988	2'979	2'948	2'922	2'895	2'883
	18	2'763	2'757	2'757	2'716	2'734	2'716	2'705	2'706	2'685	2'682	2'683
	19	2'936	2'950	2'970	2'971	2'976	2'980	2'968	2'955	2'939	2'921	2'916
	20	2'583	2'563	2'517	2'457	2'423	2'378	2'338	2'289	2'229	2'182	2'200
	21	—	—	—	—	—	—	—	—	—	—	—
	22	2'535	2'531	2'507	2'522	2'520	2'511	2'504	2'494	2'492	2'485	2'483
	23	2'343	2'341	2'337	2'294	2'274	2'273	2'279	2'272	2'276	2'297	2'301
	24	2'531	2'553	2'581	2'601	2'610	2'613	2'612	2'622	2'606	2'604	2'583
	25	2'299	2'331	2'318	2'329	2'352	2'373	2'402	2'445	2'461	2'481	2'509
	26	2'572	2'593	2'588	2'578	2'566	2'558	2'574	2'540	2'528	2'518	2'505
	27	2'467	2'472	2'463	2'480	2'471	2'470	2'470	2'468	2'458	2'469	2'483
	28	—	—	—	—	—	—	—	—	—	—	—
	29	2'148	2'138	2'109	2'115	2'135	2'158	2'208	2'247	2'297	2'332	2'370
	30	2'613	2'631	2'635	2'647	2'645	2'646	2'598	2'588	2'556	2'512	2'484
	31	2'671	2'639	2'661	2'708	2'720	2'713	2'749	2'748	2'754	2'760	2'776
Hourly Means	2'6676	2'6810	2'6861	2'6892	2'6890	2'6849	2'6828	2'6708	2'6620	2'6609	2'6603	2'6647
APRIL.	1	2'903	2'914	2'906	2'889	2'868	2'850	2'813	2'782	2'736	2'715	2'708
	2	—	—	—	—	—	—	—	—	—	—	—
	3	2'569	2'588	2'602	2'616	2'611	2'605	2'606	2'596	2'596	2'581	2'574
	4	—	—	—	—	—	—	—	—	—	—	—
	5	2'745	2'743	2'742	2'778	2'783	2'784	2'771	2'766	2'768	2'767	2'741
	6	2'287	2'279	2'273	2'226	2'213	2'193	2'174	2'154	2'111	2'073	2'088
	7	2'507	2'531	2'569	2'601	2'619	2'643	2'646	2'618	2'645	2'627	2'628
	8	2'541	2'575	2'525	2'463	2'427	2'382	2'350	2'311	2'275	2'264	2'264
	9	2'623	2'659	2'709	2'707	2'696	2'684	2'681	2'670	2'654	2'616	2'598
	10	2'334	2'341	2'352	2'367	2'377	2'403	2'415	2'407	2'416	2'458	2'477
	11	—	—	—	—	—	—	—	—	—	—	—
	12	2'277	2'301	2'314	2'357	2'386	2'419	2'453	2'475	2'503	2'510	2'528
	13	2'557	2'577	2'574	2'560	2'557	2'533	2'505	2'477	2'446	2'427	2'415
	14	2'665	2'683	2'698	2'700	2'707	2'703	2'680	2'664	2'622	2'598	2'561
	15	2'626	2'632	2'632	2'646	2'668	2'663	2'664	2'669	2'661	2'661	2'661
	16	2'740	2'740	2'740	2'729	2'719	2'665	2'639	2'563	2'489	2'465	2'455
	17	2'424	2'452	2'462	2'490	2'496	2'504	2'516	2'530	2'538	2'546	2'554
	18	—	—	—	—	—	—	—	—	—	—	—
	19	2'978	2'972	2'949	2'943	2'930	2'916	2'889	2'868	2'847	2'836	2'823
	20	2'868	2'867	2'837	2'819	2'815	2'805	2'760	2'766	2'749	2'740	2'714
	21	2'540	2'540	2'556	2'546	2'515	2'501	2'484	2'486	2'482	2'499	2'478
	22	2'574	2'592	2'603	2'632	2'611	2'653	2'667	2'684	2'684	2'682	2'694
	23	2'860	2'884	2'896	2'919	2'934	2'944	2'949	2'956	2'945	2'938	2'945
	24	2'993	3'005	3'011	3'026	3'029	3'033	3'035	3'038	3'022	3'006	2'989
	25	—	—	—	—	—	—	—	—	—	—	—
	26	2'500	2'490	2'496	2'490	2'481	2'466	2'456	2'440	2'413	2'407	2'396
	27	2'155	2'190	2'240	2'306	2'352	2'392	2'393	2'413	2'425	2'449	2'477
	28	2'608	2'628	2'653	2'633	2'629	2'603	2'575	2'519	2'483	2'449	2'401
	29	2'178	2'169	2'147	2'116	2'128	2'097	2'077	2'093	2'112	2'110	2'134
	30	2'317	2'348	2'368	2'367	2'383	2'375	2'371	2'391	2'383	2'392	2'428
Hourly Means	2'5812	2'5936	2'6010	2'6050	2'6067	2'6002	2'5909	2'5826	2'5682	2'5606	2'5564	2'5617

* Good Friday.

BAROMETRIC PRESSURE

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
501	2'520	2'539
508	2'759	2'765
519	2'793	2'793
602	2'804	2'813
604	3'000	3'007
676	2'948	2'909
—	—	—
839	2'845	2'854
873	2'859	2'821
958	2'760	2'692
104	2'791	2'795
107	5'685	5'653
568	2'667	2'678
—	—	—
18	2'718	2'718
58	2'793	2'789
95	2'883	2'877
121	2'683	2'723
21	2'916	2'901
82	2'200	2'171
—	—	—
97	2'383	2'487
105	2'401	2'321
104	2'583	2'576
81	2'509	2'527
168	2'505	2'502
19	2'403	2'501
—	—	—
32	2'370	2'432
12	2'484	2'498
60	2'776	2'794
309	2'6603	2'6617
—	—	—
15	2'708	2'680
—	—	—
81	2'574	2'569
—	—	—
37	2'741	2'730
73	2'088	2'120
27	2'628	2'649
54	2'264	2'290
6	2'598	2'573
58	2'477	2'513
—	—	—
0	2'528	2'566
7	2'615	2'601
8	2'561	2'561
1	2'661	2'672
5	2'455	2'407
6	2'554	2'571
—	—	—
6	2'823	2'824
0	2'704	2'711
9	2'478	2'484
2	2'694	2'687
8	2'945	2'917
6	2'989	2'988
—	—	—
7	2'396	2'408
9	2'465	2'477
0	2'401	2'367
0	2'134	2'163
2	2'428	2'486
—	—	—
06	2'5564	2'5617

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'557	2'575	2'579	2'579	2'579	2'599	2'615	2'629	2'678	2'700	2'704	2'745	2'5397
2'761	2'758	2'764	2'780	2'788	2'778	2'776	2'768	2'768	2'750	2'748	2'742	2'7761
2'991	2'607	2'607	2'591	2'591	2'621	2'614	2'625	2'632	2'630	2'624	2'693	2'6407
2'829	2'829	2'838	2'867	2'888	2'893	2'893	2'920	2'919	2'934	2'941	2'946	2'8368
3'013	3'010	2'996	3'016	3'010	3'011	3'015	3'013	3'014	3'010	3'014	3'041	3'0138
2'890	2'867	2'832	2'798	2'763	2'747	—	—	—	—	—	—	—
—	—	—	—	—	—	2'532	2'558	2'569	2'587	2'616	2'641	2'8570
2'866	2'887	2'908	2'967	2'964	2'967	2'963	2'988	2'964	2'965	2'970	2'981	2'8683
2'815	2'756	2'712	2'694	2'672	2'666	2'642	2'637	2'635	2'629	2'655	2'655	2'8054
2'706	2'719	2'744	2'810	2'830	2'843	2'850	2'884	2'892	2'886	2'891	2'898	2'7559
2'782	2'780	2'775	2'768	2'756	2'747	2'742	2'742	2'741	2'732	2'731	2'730	2'8033
2'641	2'611	2'633	2'607	2'601	2'596	2'593	2'608	2'621	2'621	2'646	2'680	2'6704
2'676	2'672	2'679	2'694	2'704	2'705	—	—	—	—	—	—	2'6973
—	—	—	—	—	—	2'658	2'684	2'691	2'705	2'711	2'736	—
2'716	2'732	2'740	2'733	2'731	2'722	2'706	2'709	2'699	2'689	2'701	2'705	2'7247
2'829	2'851	2'886	2'899	2'907	2'914	2'932	2'943	2'951	2'951	2'957	2'960	2'8363
2'867	2'875	2'881	2'877	2'865	2'851	2'829	2'817	2'785	2'781	2'771	2'765	2'8934
2'767	2'802	2'819	2'817	2'831	2'839	2'841	2'844	2'879	2'886	2'910	2'937	2'7845
2'896	2'884	2'849	2'829	2'813	2'809	2'780	2'726	2'689	2'651	2'615	2'581	2'8545
2'151	2'147	2'196	2'246	2'272	2'316	—	—	—	—	—	—	—
—	—	—	—	—	—	2'601	2'580	2'563	2'543	2'531	2'523	2'3751
2'497	2'480	2'482	2'482	2'480	2'476	2'456	2'436	2'410	2'392	2'383	2'355	2'4751
2'331	2'353	2'355	2'371	2'394	2'424	2'437	2'438	2'434	2'446	2'465	2'481	2'3557
2'591	2'561	2'565	2'551	2'520	2'500	2'454	2'412	2'357	2'284	2'272	2'278	2'5170
2'551	2'562	2'562	2'583	2'578	2'571	2'569	2'553	2'563	2'513	2'576	2'590	2'4845
2'500	2'504	2'511	2'493	2'498	2'484	2'468	2'459	2'424	2'432	2'436	2'441	2'5113
2'517	2'531	2'551	2'577	2'593	2'586	—	—	—	—	—	—	2'4517
2'465	2'517	2'516	2'579	2'591	2'603	2'605	2'606	2'591	2'594	2'588	2'589	2'3985
2'493	2'437	2'449	2'426	2'422	2'429	2'424	2'426	2'470	2'501	2'517	2'539	2'5257
2'820	2'818	2'812	2'849	2'855	2'871	2'881	2'854	2'858	2'877	2'891	2'897	2'7891
2'6689	2'6713	2'6767	2'6846	2'6850	2'6877	2'6785	2'6759	2'6716	2'6664	2'6703	2'6779	2'6756
2'670	2'633	2'617	2'553	2'517	2'483	—	—	—	—	—	—	—
2'575	2'571	2'595	2'572	2'565	2'561	2'525	2'525	2'529	2'533	2'529	2'549	2'6845
—	—	—	—	—	—	2'707	2'707	2'711	2'690	2'672	2'709	2'6146
2'708	2'666	2'667	2'635	2'617	2'560	2'520	2'497	2'409	2'391	2'335	2'313	2'6432
2'170	2'222	2'273	2'305	2'326	2'338	2'352	2'368	2'381	2'411	2'441	2'463	2'2600
2'661	2'660	2'656	2'664	2'665	2'660	2'633	2'634	2'601	2'579	2'595	2'565	2'6202
2'314	2'346	2'375	2'396	2'401	2'439	2'458	2'471	2'493	2'509	2'529	2'537	2'4140
2'546	2'504	2'507	2'493	2'466	2'416	2'421	2'385	2'350	2'321	2'309	2'312	2'5388
2'539	2'547	2'590	2'611	2'626	2'627	—	—	—	—	—	—	—
—	—	—	—	—	—	2'477	2'433	2'368	2'321	2'301	2'289	2'4412
2'606	2'619	2'646	2'675	2'675	2'675	2'707	2'718	2'716	2'716	2'716	2'731	2'5537
2'600	2'590	2'596	2'596	2'580	2'592	2'572	2'561	2'587	2'633	2'637	2'639	2'6480
2'561	2'547	2'565	2'568	2'574	2'569	2'575	2'579	2'603	2'601	2'589	2'580	2'6147
2'691	2'703	2'719	2'721	2'722	2'723	2'724	2'726	2'724	2'725	2'723	2'726	2'6967
2'389	2'371	2'369	2'351	2'375	2'367	2'361	2'361	2'377	2'365	2'371	2'409	2'4924
2'591	2'621	2'660	2'674	2'711	2'712	—	—	—	—	—	—	—
—	—	—	—	—	—	3'003	3'003	3'005	3'001	2'991	2'979	2'6681
2'841	2'836	2'856	2'870	2'852	2'862	2'860	2'856	2'838	2'836	2'818	2'824	2'8718
2'714	2'680	2'673	2'649	2'628	2'578	2'566	2'510	2'500	2'516	2'516	2'516	2'6846
2'492	2'509	2'510	2'522	2'522	2'524	2'544	2'542	2'510	2'518	2'534	2'542	2'5165
2'688	2'703	2'705	2'704	2'709	2'712	2'738	2'749	2'761	2'784	2'795	2'841	2'6951
2'949	2'964	2'972	2'984	2'970	2'979	2'983	2'987	2'985	2'980	2'981	2'980	2'9513
2'988	2'976	2'976	2'989	2'978	2'984	—	—	—	—	—	—	—
—	—	—	—	—	—	2'573	2'543	2'515	2'499	2'490	2'475	2'8819
2'382	2'348	2'330	2'268	2'225	2'158	2'096	2'066	2'057	2'086	2'083	2'129	2'3196
2'507	2'520	2'539	2'524	2'523	2'531	2'535	2'539	2'542	2'547	2'563	2'582	2'4458
2'349	2'352	2'313	2'275	2'260	2'273	2'264	2'216	2'197	2'178	2'152	2'146	2'3968
2'186	2'218	2'258	2'272	2'272	2'265	2'259	2'265	2'275	2'283	2'277	2'309	2'1952
2'500	2'529	2'563	2'593	2'607	2'603	2'619	2'647	2'629	2'617	2'621	2'630	2'4893
2'5687	2'5694	2'5812	2'5786	2'5746	2'5688	2'5629	2'5555	2'5477	2'5456	2'5427	2'5510	2'5731

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1 2'636	2'658	2'660	2'670	2'677	2'698	2'665	2'648	2'641	2'641	2'615	2'606
	2 —	—	—	—	—	—	—	—	—	—	—	—
	3 2'616	2'617	2'620	2'643	2'654	2'662	2'691	2'697	2'705	2'723	2'745	2'750
	4 2'906	2'917	2'916	2'920	2'933	2'907	2'903	2'870	2'861	2'847	2'847	2'847
	5 2'953	2'959	2'966	2'965	2'970	2'959	2'942	2'925	2'894	2'875	2'859	2'848
	6 2'852	2'863	2'860	2'835	2'818	2'802	2'774	2'745	2'722	2'701	2'699	2'679
	7 2'515	2'509	2'499	2'465	2'452	2'431	2'396	2'364	2'331	2'313	2'288	2'286
	8 2'140	2'148	2'138	2'140	2'138	2'137	2'139	2'149	2'156	2'154	2'168	2'153
	9 —	—	—	—	—	—	—	—	—	—	—	—
	10 2'622	2'636	2'641	2'641	2'649	2'641	2'631	2'592	2'567	2'549	2'542	2'545
	11 2'526	2'538	2'530	2'506	2'505	2'497	2'487	2'481	2'468	2'458	2'445	2'435
	12 2'405	2'413	2'407	2'412	2'410	2'419	2'415	2'416	2'418	2'432	2'432	2'436
	13 2'648	2'667	2'684	2'699	2'714	2'712	2'706	2'702	2'687	2'673	2'673	2'691
	14 2'714	2'732	2'752	2'760	2'763	2'772	2'778	2'761	2'737	2'743	2'737	2'727
	15 2'760	2'767	2'779	2'778	2'776	2'770	2'761	2'748	2'735	2'716	2'711	2'707
	16 —	—	—	—	—	—	—	—	—	—	—	—
	17 2'537	2'545	2'541	2'538	2'534	2'532	2'525	2'511	2'489	2'480	2'472	2'462
	18 2'479	2'483	2'487	2'474	2'484	2'484	2'475	2'460	2'445	2'432	2'424	2'426
	19 2'519	2'523	2'533	2'514	2'559	2'565	2'570	2'566	2'555	2'566	2'563	2'561
	20 2'683	2'696	2'702	2'716	2'718	2'709	2'706	2'725	2'689	2'681	2'673	2'618
	21 2'586	2'590	2'554	2'538	2'536	2'520	2'509	2'451	2'418	2'388	2'355	2'353
	22 2'285	2'287	2'294	2'314	2'331	2'337	2'341	2'365	2'376	2'373	2'387	2'384
	23 —	—	—	—	—	—	—	—	—	—	—	—
	24 2'543	2'559	2'555	2'563	2'553	2'549	2'543	2'514	2'516	2'501	2'495	2'490
	25 2'490	2'481	2'466	2'454	2'440	2'423	2'397	2'342	2'348	2'348	2'333	2'322
	26 2'694	2'713	2'745	2'757	2'773	2'773	2'772	2'784	2'780	2'758	2'758	2'732
	27 2'826	2'814	2'825	2'824	2'812	2'809	2'778	2'755	2'743	2'730	2'723	2'712
	28 2'751	2'773	2'763	2'723	2'718	2'704	2'681	2'658	2'651	2'624	2'624	2'624
	29 2'591	2'584	2'580	2'548	2'524	2'510	2'521	2'483	2'497	2'462	2'463	2'472
	30 —	—	—	—	—	—	—	—	—	—	—	—
	31 2'547	2'514	2'563	2'548	2'552	2'542	2'541	2'535	2'525	2'518	2'512	2'525
Hourly Means	2'6086	2'6160	2'6177	2'6144	2'6155	2'6102	2'6018	2'5865	2'5762	2'5655	2'5597	2'5550
JUNE.	1 2'463	2'468	2'487	2'461	2'466	2'457	2'461	2'448	2'436	2'457	2'447	2'435
	2 2'580	2'620	2'644	2'678	2'679	2'678	2'691	2'666	2'678	2'672	2'676	2'643
	3 2'607	2'621	2'621	2'580	2'566	2'563	2'550	2'505	2'495	2'469	2'460	2'434
	4 2'358	2'354	2'360	2'374	2'390	2'399	2'415	2'433	2'447	2'473	2'515	2'539
	5 2'665	2'686	2'700	2'702	2'701	2'694	2'678	2'681	2'679	2'685	2'697	2'697
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 2'798	2'802	2'799	2'819	2'814	2'808	2'783	2'764	2'731	2'741	2'718	2'691
	8 2'690	2'698	2'690	2'672	2'692	2'663	2'668	2'659	2'651	2'643	2'630	2'636
	9 2'517	2'501	2'505	2'492	2'527	2'466	2'449	2'432	2'422	2'371	2'375	2'356
	10 2'320	2'318	2'298	2'294	2'284	2'284	2'280	2'257	2'250	2'231	2'211	2'207
	11 2'135	2'133	2'133	2'137	2'126	2'111	2'129	2'115	2'157	2'149	2'168	2'191
	12 2'455	2'467	2'472	2'474	2'480	2'492	2'480	2'451	2'434	2'413	2'399	2'392
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 2'021	2'020	2'060	2'072	2'097	2'125	2'163	2'195	2'238	2'254	2'276	2'292
	15 2'358	2'373	2'379	2'401	2'423	2'450	2'463	2'474	2'474	2'480	2'485	2'502
	16 2'651	2'658	2'658	2'657	2'658	2'671	2'689	2'699	2'698	2'711	2'713	2'713
	17 2'858	2'872	2'875	2'876	2'881	2'883	2'871	2'882	2'876	2'880	2'868	2'839
	18 2'800	2'788	2'778	2'774	2'751	2'741	2'710	2'663	2'632	2'604	2'584	2'565
	19 2'441	2'433	2'403	2'385	2'372	2'364	2'371	2'395	2'427	2'434	2'438	2'431
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 2'538	2'515	2'549	2'547	2'542	2'541	2'534	2'522	2'526	2'522	2'521	2'511
	22 2'611	2'618	2'632	2'644	2'651	2'647	2'638	2'636	2'629	2'635	2'647	2'641
	23 2'741	2'757	2'772	2'772	2'770	2'769	2'761	2'749	2'737	2'730	2'722	2'723
	24 2'844	2'862	2'869	2'862	2'849	2'844	2'831	2'827	2'817	2'804	2'794	2'778
	25 2'761	2'771	2'777	2'764	2'762	2'760	2'749	2'726	2'707	2'680	2'665	2'657
	26 2'695	2'701	2'715	2'712	2'704	2'691	2'681	2'663	2'650	2'638	2'627	2'613
	27 —	—	—	—	—	—	—	—	—	—	—	—
	28 2'628	2'636	2'614	2'639	2'633	2'646	2'634	2'616	2'603	2'585	2'567	2'563
	29 2'593	2'596	2'598	2'583	2'584	2'577	2'573	2'577	2'564	2'564	2'556	2'559
	30 2'659	2'673	2'681	2'686	2'691	2'690	2'683	2'676	2'668	2'652	2'641	2'639
Hourly Means	2'5694	2'5758	2'5807	2'5795	2'5805	2'5775	2'5738	2'5658	2'5622	2'5568	2'5538	2'5480

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
2'604	2'591	2'581	2'621	2'633	2'618	2'569	2'559	2'553	2'561	2'570	2'602	2'6199
2'762	2'774	2'800	2'810	2'822	2'831	2'833	2'830	2'842	2'846	2'861	2'867	2'7500
2'849	2'835	2'843	2'853	2'856	2'866	2'873	2'874	2'878	2'894	2'900	2'937	2'8805
2'832	2'821	2'830	2'838	2'839	2'840	2'840	2'840	2'831	2'831	2'835	2'831	2'8800
2'663	2'639	2'627	2'631	2'632	2'600	2'599	2'570	2'550	2'535	2'526	2'523	2'6853
2'268	2'263	2'266	2'248	2'238	2'223	2'201	2'177	2'137	2'105	2'120	2'060	2'3001
2'179	2'185	2'216	2'234	2'255	2'277	2'271	2'276	2'268	2'260	2'279	2'265	2'2739
2'525	2'525	2'534	2'548	2'545	2'547	2'548	2'504	2'498	2'480	2'488	2'511	2'5630
2'431	2'425	2'426	2'428	2'418	2'413	2'409	2'411	2'419	2'429	2'423	2'396	2'4543
2'460	2'467	2'479	2'494	2'530	2'534	2'554	2'557	2'565	2'580	2'600	2'624	2'4778
2'689	2'699	2'691	2'679	2'684	2'692	2'684	2'665	2'663	2'670	2'675	2'703	2'6853
2'725	2'727	2'737	2'727	2'727	2'721	2'725	2'721	2'711	2'722	2'731	2'743	2'7382
2'702	2'699	2'687	2'710	2'722	2'728	2'726	2'713	2'708	2'716	2'724	2'735	2'6824
2'454	2'452	2'441	2'440	2'442	2'447	2'451	2'454	2'453	2'456	2'456	2'456	2'4820
2'424	2'425	2'437	2'464	2'468	2'460	2'466	2'461	2'468	2'477	2'484	2'496	2'4618
2'563	2'561	2'573	2'581	2'589	2'593	2'610	2'616	2'615	2'624	2'624	2'632	2'5787
2'673	2'668	2'661	2'633	2'625	2'627	2'596	2'597	2'590	2'582	2'587	2'583	2'6536
2'355	2'353	2'363	2'372	2'371	2'364	2'322	2'298	2'246	2'233	2'233	2'235	2'3931
2'387	2'381	2'461	2'498	2'491	2'498	2'567	2'553	2'543	2'539	2'543	2'542	2'4232
2'495	2'499	2'501	2'525	2'503	2'489	2'497	2'491	2'494	2'491	2'482	2'492	2'5149
2'333	2'332	2'336	2'372	2'396	2'471	2'514	2'530	2'576	2'609	2'626	2'672	2'4433
2'723	2'732	2'758	2'718	2'757	2'759	2'760	2'763	2'761	2'762	2'782	2'828	2'7589
2'632	2'712	2'722	2'719	2'737	2'714	2'740	2'737	2'725	2'718	2'720	2'721	2'7539
2'632	2'621	2'638	2'654	2'664	2'682	2'688	2'624	2'638	2'624	2'639	2'621	2'6682
2'463	2'472	2'510	2'560	2'582	2'622	2'638	2'673	2'631	2'599	2'599	2'570	2'5545
2'512	2'535	2'511	2'489	2'481	2'469	2'451	2'411	2'445	2'413	2'403	2'400	2'4984
2'559	2'558	2'566	2'5745	2'5797	2'5811	2'5838	2'5736	2'5712	2'5724	2'5763	2'5865	2'5837
2'427	2'425	2'431	2'439	2'447	2'459	2'475	2'480	2'493	2'512	2'526	2'540	2'4663
2'644	2'628	2'636	2'637	2'641	2'635	2'637	2'594	2'582	2'584	2'580	2'609	2'6376
2'424	2'424	2'393	2'384	2'367	2'362	2'338	2'344	2'341	2'344	2'338	2'328	2'4510
2'539	2'539	2'573	2'617	2'620	2'630	2'621	2'607	2'616	2'615	2'630	2'642	2'5144
2'743	2'749	2'753	2'740	2'716	2'751	2'733	2'734	2'754	2'754	2'769	2'798	2'7204
2'675	2'657	2'673	2'672	2'672	2'664	2'655	2'670	2'667	2'667	2'667	2'695	2'7209
2'592	2'588	2'589	2'591	2'593	2'573	2'561	2'548	2'540	2'532	2'523	2'497	2'6133
2'363	2'355	2'363	2'393	2'385	2'393	2'391	2'355	2'339	2'332	2'324	2'317	2'4051
2'187	2'177	2'179	2'165	2'166	2'163	2'151	2'152	2'122	2'115	2'127	2'129	2'2111
2'227	2'252	2'266	2'287	2'297	2'318	2'327	2'344	2'358	2'378	2'389	2'441	2'2320
2'380	2'381	2'368	2'376	2'386	2'386	2'362	2'042	2'036	2'018	2'020	2'010	2'3264
2'315	2'327	2'334	2'353	2'355	2'356	2'342	2'340	2'338	2'332	2'341	2'355	2'2459
2'510	2'534	2'544	2'580	2'581	2'591	2'606	2'604	2'624	2'625	2'633	2'645	2'5141
2'729	2'733	2'749	2'768	2'783	2'787	2'801	2'792	2'796	2'811	2'830	2'842	2'7332
2'828	2'822	2'834	2'823	2'809	2'796	2'804	2'803	2'813	2'817	2'798	2'798	2'8419
2'527	2'520	2'500	2'492	2'487	2'486	2'484	2'455	2'437	2'427	2'427	2'432	2'5860
2'425	2'476	2'486	2'512	2'512	2'525	2'528	2'514	2'501	2'500	2'508	2'526	2'4545
2'521	2'511	2'501	2'545	2'556	2'562	2'562	2'528	2'536	2'558	2'561	2'587	2'5361
2'647	2'641	2'638	2'647	2'660	2'667	2'682	2'678	2'678	2'685	2'706	2'733	2'6571
2'722	2'723	2'736	2'733	2'753	2'765	2'777	2'775	2'776	2'789	2'809	2'824	2'7606
2'794	2'778	2'765	2'754	2'756	2'759	2'769	2'753	2'746	2'754	2'759	2'751	2'7940
2'665	2'657	2'657	2'643	2'646	2'660	2'669	2'658	2'647	2'641	2'643	2'669	2'6923
2'627	2'613	2'609	2'610	2'616	2'630	2'643	2'594	2'597	2'597	2'591	2'598	2'6429
2'567	2'563	2'565	2'577	2'573	2'574	2'570	2'570	2'571	2'567	2'567	2'579	2'5935
2'536	2'539	2'567	2'570	2'588	2'598	2'601	2'596	2'596	2'606	2'618	2'641	2'5860
2'641	2'639	2'643	2'647	2'656	2'666	2'671	2'677	2'695	2'702	2'701	2'708	2'6740
2'538	2'540	2'533	2'5640	2'5667	2'5688	2'5514	2'5469	2'5460	2'5483	2'5534	2'5679	2'5619

BAROMETRIC PRESSURE.											
Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'732	2'745	2'751	2'759	2'760	2'767	2'762	2'758	2'746	2'737	2'726
2	2'782	2'795	2'795	2'809	2'816	2'817	2'803	2'791	2'778	2'763	2'750
3	2'775	2'797	2'804	2'808	2'797	2'791	2'780	2'763	2'753	2'740	2'729
4	—	—	—	—	—	—	—	—	—	—	—
5	2'735	2'743	2'743	2'742	2'740	2'737	2'727	2'711	2'692	2'679	2'669
6	2'725	2'737	2'765	2'787	2'763	2'756	2'752	2'751	2'746	2'730	2'716
7	2'736	2'762	2'761	2'761	2'764	2'751	2'743	2'739	2'722	2'701	2'693
8	2'665	2'681	2'688	2'691	2'690	2'671	2'665	2'651	2'643	2'621	2'611
9	2'661	2'661	2'660	2'663	2'656	2'647	2'633	2'622	2'614	2'592	2'590
10	2'558	2'565	2'574	2'583	2'581	2'584	2'576	2'551	2'541	2'527	2'524
11	—	—	—	—	—	—	—	—	—	—	—
12	2'549	2'553	2'558	2'572	2'565	2'572	2'566	2'557	2'553	2'518	2'510
13	2'528	2'526	2'510	2'530	2'526	2'517	2'514	2'494	2'505	2'506	2'516
14	2'685	2'689	2'702	2'701	2'693	2'681	2'667	2'665	2'669	2'663	2'643
15	2'593	2'607	2'611	2'607	2'600	2'593	2'588	2'567	2'548	2'530	2'528
16	2'604	2'612	2'609	2'611	2'629	2'610	2'595	2'594	2'588	2'574	2'571
17	2'617	2'615	2'615	2'618	2'605	2'611	2'601	2'596	2'579	2'610	2'599
18	—	—	—	—	—	—	—	—	—	—	—
19	2'678	2'682	2'681	2'677	2'641	2'644	2'638	2'623	2'607	2'588	2'585
20	2'605	2'607	2'622	2'619	2'615	2'603	2'603	2'577	2'567	2'545	2'545
21	2'538	2'534	2'536	2'528	2'524	2'495	2'477	2'465	2'445	2'415	2'406
22	2'507	2'526	2'550	2'572	2'576	2'599	2'599	2'610	2'608	2'605	2'607
23	2'847	2'871	2'879	2'881	2'882	2'886	2'885	2'881	2'863	2'853	2'845
24	2'837	2'834	2'839	2'829	2'839	2'822	2'802	2'786	2'772	2'733	2'717
25	—	—	—	—	—	—	—	—	—	—	—
26	2'439	2'469	2'518	2'513	2'554	2'601	2'617	2'613	2'621	2'623	2'621
27	2'777	2'797	2'809	2'834	2'832	2'828	2'832	2'817	2'807	2'799	2'783
28	2'765	2'761	2'762	2'757	2'757	2'734	2'728	2'709	2'691	2'670	2'661
29	2'578	2'574	2'564	2'555	2'534	2'511	2'507	2'483	2'454	2'442	2'443
30	2'482	2'486	2'492	2'491	2'506	2'496	2'485	2'482	2'478	2'462	2'458
31	2'486	2'496	2'490	2'497	2'484	2'484	2'476	2'463	2'463	2'477	2'483
Aug. 1	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6183	2'6565	2'6636	2'6665	2'6640	2'6594	2'6526	2'6414	2'6309	2'6186	2'6135
2	2'732	2'740	2'765	2'777	2'785	2'778	2'775	2'750	2'746	2'731	2'747
3	2'799	2'801	2'799	2'805	2'810	2'791	2'777	2'773	2'760	2'757	2'751
4	2'726	2'715	2'715	2'713	2'711	2'698	2'672	2'666	2'643	2'625	2'603
5	2'485	2'484	2'477	2'479	2'495	2'449	2'433	2'409	2'393	2'368	2'355
6	2'293	2'302	2'314	2'316	2'317	2'319	2'320	2'328	2'328	2'315	2'338
7	2'497	2'523	2'542	2'547	2'551	2'540	2'540	2'544	2'543	2'534	2'540
8	—	—	—	—	—	—	—	—	—	—	—
9	2'762	2'796	2'796	2'798	2'809	2'809	2'799	2'796	2'789	2'783	2'780
10	2'810	2'816	2'826	2'838	2'845	2'821	2'812	2'801	2'777	2'761	2'767
11	2'747	2'751	2'752	2'765	2'761	2'762	2'753	2'759	2'753	2'739	2'721
12	2'768	2'780	2'792	2'792	2'793	2'788	2'763	2'763	2'734	2'741	2'713
13	2'714	2'724	2'717	2'703	2'700	2'697	2'674	2'658	2'640	2'624	2'610
14	2'575	2'583	2'583	2'600	2'591	2'592	2'583	2'576	2'572	2'560	2'549
15	—	—	—	—	—	—	—	—	—	—	—
16	2'581	2'579	2'582	2'591	2'602	2'596	2'595	2'583	2'572	2'572	2'536
17	2'458	2'454	2'454	2'437	2'445	2'428	2'364	2'395	2'363	2'344	2'362
18	2'431	2'445	2'447	2'455	2'457	2'460	2'461	2'471	2'465	2'469	2'496
19	2'558	2'560	2'577	2'559	2'556	2'540	2'532	2'526	2'518	2'517	2'521
20	2'534	2'534	2'526	2'523	2'521	2'494	2'468	2'460	2'447	2'439	2'458
21	2'555	2'559	2'564	2'569	2'574	2'574	2'562	2'562	2'556	2'549	2'554
22	—	—	—	—	—	—	—	—	—	—	—
23	2'788	2'795	2'800	2'812	2'818	2'813	2'801	2'797	2'771	2'773	2'770
24	2'867	2'872	2'883	2'899	2'907	2'902	2'895	2'891	2'880	2'878	2'874
25	2'929	2'929	2'953	2'946	2'941	2'941	2'924	2'910	2'915	2'891	2'869
26	2'757	2'747	2'733	2'717	2'716	2'679	2'662	2'646	2'616	2'593	2'581
27	2'575	2'591	2'593	2'617	2'631	2'639	2'627	2'633	2'622	2'620	2'613
28	2'658	2'666	2'665	2'672	2'667	2'663	2'653	2'647	2'630	2'618	2'608
29	—	—	—	—	—	—	—	—	—	—	—
30	2'682	2'674	2'664	2'655	2'640	2'629	2'612	2'603	2'585	2'583	2'567
31	2'765	2'789	2'801	2'814	2'824	2'816	2'800	2'788	2'784	2'765	2'735
Hourly Means	2'6556	2'6619	2'6660	2'6692	2'6714	2'6623	2'6485	2'6437	2'6308	2'6212	2'6169

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
737	2'726	2'713	2'717	2'711	2'711	2'743	2'753	2'760	2'760	2'749	2'745	2'745	2'753	2'771	2'7447
763	2'763	2'750	2'746	2'740	2'749	2'745	2'746	2'752	2'747	2'741	2'751	2'760	2'770	2'775	2'7702
740	2'729	2'723	2'717	2'697	2'700	2'707	2'709	2'720	—	—	—	—	—	—	2'7366
679	2'693	2'689	2'687	2'686	2'696	2'708	2'710	2'700	2'686	2'685	2'685	2'691	2'692	2'731	2'7116
730	2'716	2'700	2'714	2'728	2'717	2'733	2'735	2'729	2'702	2'715	2'717	2'712	2'708	2'706	2'7350
701	2'693	2'681	2'681	2'665	2'667	2'680	2'674	2'671	2'661	2'649	2'653	2'646	2'647	2'645	2'6989
621	2'611	2'606	2'596	2'600	2'603	2'605	2'598	2'599	2'602	2'608	2'610	2'611	2'611	2'649	2'6323
592	2'590	2'580	2'587	2'578	2'581	2'587	2'589	2'589	2'591	2'558	2'564	2'560	2'558	2'554	2'6032
527	2'524	2'506	2'497	2'487	2'526	2'527	2'531	2'528	—	—	—	—	—	—	2'5367
518	2'510	2'499	2'493	2'492	2'500	2'514	2'505	2'515	2'520	2'508	2'502	2'508	2'525	2'553	2'5246
506	2'516	2'527	2'548	2'567	2'596	2'621	2'624	2'636	2'641	2'643	2'646	2'649	2'663	2'662	2'5719
663	2'643	2'617	2'603	2'586	2'602	2'597	2'594	2'596	2'584	2'580	2'580	2'577	2'581	2'591	2'6311
530	2'536	2'528	2'528	2'516	2'514	2'512	2'513	2'513	2'559	2'554	2'555	2'551	2'563	2'604	2'5592
574	2'571	2'579	2'587	2'588	2'576	2'588	2'596	2'591	2'591	2'587	2'595	2'596	2'604	2'608	2'5951
610	2'599	2'611	2'639	2'639	2'646	2'654	2'671	2'675	—	—	—	—	—	—	2'6298
588	2'585	2'576	2'574	2'568	2'574	2'541	2'578	2'581	2'649	2'653	2'654	2'653	2'655	2'650	2'6066
545	2'545	2'537	2'540	2'544	2'555	2'555	2'551	2'559	2'530	2'530	2'525	2'521	2'520	2'520	2'5615
415	2'406	2'426	2'419	2'427	2'422	2'424	2'440	2'432	2'432	2'438	2'448	2'453	2'469	2'495	2'4620
605	2'607	2'619	2'627	2'655	2'683	2'732	2'746	2'755	2'767	2'803	2'794	2'803	2'814	2'843	2'6665
853	2'835	2'812	2'792	2'796	2'806	2'829	2'841	2'848	2'841	2'837	2'828	2'846	2'841	2'831	2'8463
733	2'717	2'705	2'699	2'685	2'673	2'653	2'630	2'610	—	—	—	—	—	—	2'6442
623	2'621	2'629	2'647	2'665	2'686	2'702	2'719	2'719	2'733	2'741	2'746	2'740	2'740	2'743	2'6416
799	2'783	2'785	2'779	2'776	2'767	2'773	2'778	2'779	2'773	2'773	2'795	2'795	2'765	2'767	2'7921
670	2'661	2'649	2'646	2'646	2'636	2'616	2'618	2'623	2'607	2'601	2'582	2'576	2'571	2'578	2'6643
442	2'443	2'423	2'419	2'397	2'375	2'392	2'417	2'423	2'437	2'437	2'435	2'446	2'463	2'464	2'4655
462	2'458	2'453	2'449	2'449	2'449	2'463	2'467	2'466	2'471	2'462	2'462	2'452	2'459	2'463	2'4701
477	2'483	2'499	2'505	2'511	2'537	2'534	2'534	2'549	2'668 ^a	2'675	2'678	2'683	2'688	2'709	2'5445
6186	2'6135	2'6082	2'6088	2'6074	2'6129	2'6198	2'6247	2'6270	2'6184	2'6168	2'6164	2'6193	2'6234	2'6338	2'6313
731	2'747	2'742	2'738	2'738	2'744	2'757	2'760	2'760	2'718	2'720	2'720	2'764	2'785	2'799	2'7527
757	2'752	2'751	2'730	2'730	2'736	2'726	2'726	2'726	2'729	2'731	2'731	2'697	2'697	2'716	2'7522
625	2'603	2'593	2'591	2'599	2'569	2'556	2'553	2'538	2'518	2'503	2'503	2'483	2'477	2'474	2'6029
368	2'355	2'329	2'316	2'309	2'317	2'320	2'311	2'305	2'300	2'284	2'277	2'278	2'269	2'263	2'3627
315	2'338	2'333	2'332	2'365	2'393	2'393	2'398	2'410	2'411	2'415	2'418	2'418	2'456	2'446	2'3624
534	2'540	2'550	2'561	2'559	2'564	2'573	2'569	2'567	—	—	—	—	—	—	2'5939
783	2'780	2'783	2'784	2'781	2'780	2'790	2'791	2'793	2'789	2'782	2'783	2'783	2'790	2'798	2'7893
761	2'767	2'753	2'755	2'755	2'751	2'755	2'755	2'744	2'734	2'728	2'729	2'726	2'724	2'725	2'7708
739	2'721	2'736	2'734	2'728	2'739	2'756	2'761	2'760	2'754	2'746	2'746	2'749	2'749	2'752	2'7489
741	2'713	2'701	2'703	2'701	2'710	2'708	2'708	2'711	2'711	2'708	2'704	2'713	2'709	2'716	2'7346
824	2'610	2'606	2'601	2'595	2'596	2'602	2'595	2'589	2'586	2'594	2'571	2'565	2'549	2'555	2'6277
760	2'549	2'570	2'571	2'574	2'592	2'598	2'600	2'593	—	—	—	—	—	—	2'5752
772	2'536	2'520	2'524	2'542	2'542	2'517	2'501	2'506	2'552	2'552	2'552	2'547	2'559	2'580	2'5328
844	2'362	2'343	2'307	2'315	2'334	2'346	2'358	2'361	2'490	2'482	2'481	2'481	2'457	2'456	2'3763
469	2'496	2'520	2'516	2'516	2'527	2'513	2'514	2'518	2'518	2'518	2'518	2'532	2'536	2'538	2'4935
517	2'521	2'524	2'520	2'525	2'537	2'547	2'535	2'531	2'530	2'520	2'518	2'520	2'520	2'523	2'5331
439	2'458	2'483	2'491	2'500	2'503	2'518	2'520	2'512	2'520	2'510	2'501	2'519	2'532	2'543	2'5023
549	2'554	2'559	2'564	2'569	2'572	2'567	2'568	2'570	—	—	—	—	—	—	2'6074
773	2'770	2'758	2'766	2'772	2'786	2'807	2'807	2'818	2'827	2'807	2'814	2'817	2'830	2'839	2'7994
778	2'874	2'871	2'867	2'871	2'890	2'882	2'897	2'905	2'898	2'905	2'901	2'903	2'908	2'925	2'8905
891	2'869	2'863	2'851	2'833	2'825	2'822	2'806	2'807	2'808	2'791	2'772	2'779	2'775	2'767	2'8603
593	2'581	2'558	2'554	2'537	2'526	2'517	2'516	2'496	2'479	2'488	2'498	2'502	2'510	2'529	2'5899
520	2'613	2'610	2'618	2'612	2'626	2'628	2'629	2'643	2'652	2'615	2'641	2'650	2'653	2'658	2'6261
518	2'608	2'610	2'610	2'596	2'620	2'647	2'639	2'632	—	—	—	—	—	—	2'6495
583	2'567	2'591	2'623	2'626	2'650	2'636	2'649	2'676	2'693	2'693	2'685	2'677	2'670	2'668	2'6525
65	2'565	2'553	2'747	2'721	2'728	2'713	2'711	2'711	2'713	2'685	2'683	2'665	2'657	2'663	2'7438
212	2'6169	2'6138	2'6152	2'6142	2'6214	2'6228	2'6222	2'6224	2'6330	2'6277	2'6258	2'6281	2'6306	2'6372	2'6360

^a Proportion of 1st August.

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'669	2'669	2'674	2'670	2'661	2'647	2'638	2'639	2'622	2'615	2'602	2'598
2	2'665	2'675	2'683	2'686	2'688	2'681	2'675	2'669	2'659	2'641	2'610	2'630
3	2'542	2'540	2'510	2'512	2'529	2'525	2'517	2'510	2'499	2'478	2'512	2'542
4	2'675	2'687	2'688	2'688	2'686	2'676	2'666	2'641	2'634	2'604	2'594	2'594
5	—	—	—	—	—	—	—	—	—	—	—	—
6	2'711	2'713	2'735	2'762	2'763	2'752	2'752	2'753	2'741	2'741	2'746	2'749
7	2'787	2'787	2'787	2'770	2'760	2'735	2'728	2'718	2'700	2'659	2'653	2'653
8	2'498	2'482	2'471	2'457	2'451	2'438	2'422	2'412	2'381	2'359	2'344	2'335
9	2'623	2'639	2'668	2'700	2'710	2'718	2'721	2'726	2'722	2'722	2'722	2'727
10	2'903	2'912	2'932	2'950	2'959	2'969	2'971	2'966	2'965	2'960	2'968	2'967
11	2'995	2'995	2'995	3'007	2'988	2'957	2'941	2'925	2'908	2'888	2'867	2'859
12	—	—	—	—	—	—	—	—	—	—	—	—
13	2'581	2'583	2'589	2'595	2'601	2'603	2'602	2'600	2'602	2'617	2'630	2'636
14	2'764	2'772	2'779	2'794	2'796	2'811	2'814	2'803	2'789	2'785	2'786	2'786
15	2'893	2'901	2'906	2'901	2'894	2'882	2'853	2'840	2'818	2'805	2'796	2'783
16	2'782	2'782	2'782	2'783	2'768	2'749	2'727	2'697	2'683	2'676	2'674	2'653
17	2'620	2'620	2'610	2'611	2'608	2'600	2'597	2'581	2'568	2'558	2'533	2'534
18	2'445	2'447	2'439	2'439	2'433	2'439	2'425	2'428	2'428	2'420	2'432	2'430
19	—	—	—	—	—	—	—	—	—	—	—	—
20	2'436	2'442	2'446	2'454	2'462	2'461	2'465	2'462	2'459	2'467	2'471	2'483
21	2'575	2'594	2'598	2'618	2'632	2'631	2'637	2'645	2'637	2'643	2'650	2'655
22	2'795	2'801	2'806	2'808	2'815	2'823	2'800	2'794	2'784	2'759	2'765	2'745
23	2'720	2'720	2'723	2'729	2'720	2'709	2'695	2'667	2'654	2'636	2'637	2'634
24	2'659	2'663	2'665	2'667	2'663	2'647	2'637	2'623	2'619	2'615	2'609	2'603
25	2'607	2'609	2'620	2'624	2'635	2'639	2'624	2'624	2'612	2'622	2'632	2'626
26	—	—	—	—	—	—	—	—	—	—	—	—
27	2'298	2'303	2'300	2'302	2'294	2'279	2'268	2'255	2'234	2'226	2'210	2'182
28	2'292	2'290	2'301	2'305	2'303	2'306	2'302	2'322	2'318	2'327	2'328	2'349
29	2'345	2'363	2'351	2'351	2'351	2'337	2'325	2'298	2'317	2'297	2'287	2'298
30	2'380	2'406	2'419	2'426	2'433	2'426	2'410	2'405	2'404	2'397	2'392	2'390
Hourly Means	2'6254	2'6306	2'6350	2'6400	2'6385	2'6324	2'6238	2'6156	2'6060	2'5968	2'5954	2'5937
OCTOBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'309	2'328	2'359	2'378	2'399	2'432	2'459	2'467	2'477	2'486	2'498	2'516
2	2'691	2'718	2'735	2'748	2'751	2'750	2'741	2'730	2'723	2'732	2'745	2'745
3	—	—	—	—	—	—	—	—	—	—	—	—
4	2'763	2'753	2'756	2'752	2'746	2'745	2'710	2'667	2'624	2'630	2'608	2'594
5	2'299	2'301	2'263	2'267	2'263	2'252	2'251	2'248	2'249	2'246	2'237	2'270
6	2'396	2'428	2'446	2'466	2'478	2'492	2'497	2'509	2'519	2'523	2'541	2'540
7	2'581	2'597	2'595	2'597	2'589	2'580	2'571	2'541	2'529	2'513	2'503	2'481
8	2'321	2'327	2'323	2'326	2'322	2'299	2'295	2'284	2'281	2'257	2'259	2'249
9	2'378	2'382	2'383	2'375	2'359	2'357	2'339	2'300	2'266	2'259	2'214	2'208
10	—	—	—	—	—	—	—	—	—	—	—	—
11	2'608	2'632	2'650	2'689	2'708	2'706	2'694	2'691	2'674	2'661	2'659	2'655
12	2'563	2'547	2'497	2'481	2'441	2'400	2'340	2'290	2'268	2'163	2'117	2'071
13	2'093	2'110	2'126	2'150	2'174	2'191	2'201	2'183	2'190	2'205	2'232	2'252
14	2'411	2'446	2'469	2'483	2'492	2'517	2'516	2'515	2'525	2'531	2'553	2'571
15	2'784	2'804	2'818	2'828	2'838	2'829	2'818	2'810	2'806	2'812	2'810	2'808
16	2'763	2'762	2'768	2'755	2'750	2'733	2'683	2'630	2'596	2'577	2'543	2'541
17	—	—	—	—	—	—	—	—	—	—	—	—
18	2'693	2'697	2'679	2'669	2'616	2'587	2'536	2'510	2'477	2'468	2'464	2'437
19	2'690	2'710	2'736	2'756	2'744	2'746	2'734	2'721	2'705	2'704	2'719	2'735
20	2'838	2'844	2'854	2'858	2'852	2'831	2'798	2'777	2'761	2'781	2'785	2'797
21	2'956	2'962	2'984	2'961	2'939	2'950	2'938	2'898	2'882	2'863	2'840	2'834
22	2'629	2'617	2'637	2'663	2'653	2'664	2'670	2'660	2'658	2'672	2'675	2'675
23	2'725	2'753	2'783	2'791	2'804	2'799	2'791	2'779	2'766	2'760	2'794	2'819
24	—	—	—	—	—	—	—	—	—	—	—	—
25	2'344	2'372	2'412	2'420	2'465	2'487	2'501	2'529	2'576	2'635	2'698	2'733
26	2'963	2'999	3'031	3'059	3'085	3'106	3'108	3'121	3'137	3'157	3'173	3'185
27	3'271	3'282	3'292	3'292	3'290	3'277	3'263	3'241	3'228	3'225	3'225	3'247
28	3'343	3'358	3'377	3'389	3'366	3'381	3'367	3'339	3'316	3'293	3'272	3'255
29	3'136	3'150	3'156	3'152	3'135	3'120	3'100	3'073	3'063	3'048	3'038	3'014
30	2'967	2'970	2'980	2'970	2'962	2'951	2'928	2'908	2'889	2'891	2'889	2'889
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6737	2'6865	2'6973	2'7021	2'7021	2'6993	2'6866	2'6702	2'6588	2'6577	2'6581	2'6594

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	2'669	2'694	2'699	2'696	2'703	2'701	2'692	2'686	2'684	2'680	2'680
	2	2'692	2'695	2'677	2'655	2'649	2'637	2'602	2'582	2'573	2'550	2'544
	3	2'472	2'472	2'462	2'448	2'450	2'439	2'420	2'397	2'389	2'393	2'403
	4	2'549	2'561	2'575	2'582	2'574	2'563	2'542	2'534	2'504	2'499	2'495
	5	2'587	2'584	2'601	2'617	2'621	2'621	2'609	2'602	2'614	2'631	2'650
	6	2'834	2'854	2'871	2'898	2'912	2'914	2'908	2'906	2'896	2'889	2'876
	7	—	—	—	—	—	—	—	—	—	—	—
	8	2'606	2'626	2'611	2'641	2'612	2'603	2'577	2'544	2'516	2'540	2'538
	9	2'346	2'330	2'360	2'349	2'385	2'402	2'451	2'473	2'486	2'504	2'520
	10	2'761	2'789	2'797	2'826	2'844	2'846	2'841	2'845	2'845	2'849	2'849
	11	2'866	2'880	2'896	2'911	2'919	2'915	2'903	2'896	2'892	2'895	2'898
	12	2'851	2'860	2'870	2'849	2'845	2'821	2'790	2'762	2'750	2'748	2'748
	13	2'803	2'802	2'844	2'858	2'857	2'850	2'832	2'849	2'829	2'790	2'792
	14	—	—	—	—	—	—	—	—	—	—	—
	15	2'357	2'379	2'427	2'471	2'506	2'531	2'562	2'578	2'608	2'632	2'670
	16	2'859	2'859	2'865	2'860	2'840	2'798	2'737	2'712	2'658	2'629	2'605
	17	2'619	2'639	2'649	2'659	2'654	2'665	2'661	2'662	2'649	2'652	2'656
	18	2'562	2'551	2'573	2'555	2'541	2'505	2'474	2'447	2'407	2'367	2'342
	19	2'541	2'573	2'642	2'687	2'717	2'737	2'749	2'773	2'800	2'838	2'870
	20	3'104	3'095	3'115	3'114	3'123	3'104	3'068	3'045	3'016	3'003	2'983
	21	—	—	—	—	—	—	—	—	—	—	—
	22	2'828	2'841	2'853	2'863	2'878	2'871	2'863	2'858	2'823	2'824	2'830
	23	2'598	2'582	2'558	2'537	2'531	2'510	2'471	2'464	2'449	2'453	2'444
	24	2'372	2'380	2'384	2'400	2'414	2'412	2'386	2'376	2'351	2'351	2'365
	25	2'237	2'265	2'283	2'271	2'276	2'267	2'261	2'263	2'293	2'307	2'321
	26	2'603	2'632	2'663	2'708	2'753	2'765	2'774	2'778	2'787	2'803	2'817
	27	2'677	2'660	2'645	2'624	2'622	2'594	2'556	2'544	2'533	2'539	2'552
	28	—	—	—	—	—	—	—	—	—	—	—
	29	3'195	3'213	3'221	3'247	3'256	3'249	3'245	3'218	3'216	3'221	3'211
	30	3'148	3'148	3'152	3'144	3'143	3'117	3'092	3'074	3'052	3'050	3'041
Hourly Means	2'6829	2'6909	2'7036	2'7104	2'7163	2'7091	2'6949	2'6872	2'6777	2'6783	2'6795	2'6793
DECEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	2'843	2'841	2'851	2'839	2'822	2'806	2'769	2'741	2'703	2'691	2'687
	2	2'410	2'430	2'455	2'465	2'475	2'488	2'497	2'497	2'491	2'520	2'530
	3	2'566	2'582	2'586	2'607	2'587	2'583	2'552	2'531	2'540	2'553	2'574
	4	2'728	2'726	2'735	2'737	2'727	2'721	2'696	2'674	2'642	2'625	2'623
	5	—	—	—	—	—	—	—	—	—	—	—
	6	2'697	2'715	2'738	2'750	2'784	2'796	2'796	2'794	2'794	2'806	2'806
	7	2'878	2'886	2'881	2'897	2'917	2'912	2'898	2'888	2'895	2'906	2'926
	8	2'821	2'821	2'813	2'801	2'781	2'750	2'700	2'676	2'677	2'685	2'694
	9	2'827	2'817	2'802	2'784	2'756	2'697	2'641	2'589	2'542	2'491	2'477
	10	2'345	2'343	2'355	2'369	2'369	2'373	2'386	2'402	2'420	2'448	2'480
	11	2'595	2'634	2'676	2'719	2'766	2'772	2'792	2'804	2'821	2'855	2'880
	12	—	—	—	—	—	—	—	—	—	—	—
	13	2'650	2'662	2'690	2'704	2'724	2'720	2'708	2'698	2'727	2'735	2'735
	14	2'700	2'702	2'688	2'670	2'654	2'627	2'601	2'583	2'567	2'577	2'589
	15	2'633	2'653	2'665	2'708	2'736	2'734	2'736	2'736	2'756	2'772	2'801
	16	3'096	3'092	3'105	3'122	3'125	3'092	3'108	3'079	3'076	3'061	3'076
	17	2'788	2'787	2'801	2'789	2'788	2'776	2'754	2'726	2'723	2'736	2'764
	18	2'810	2'808	2'804	2'826	2'810	2'786	2'753	2'706	2'671	2'647	2'617
	19	—	—	—	—	—	—	—	—	—	—	—
	20	2'792	2'822	2'842	2'860	2'886	2'877	2'877	2'865	2'868	2'898	2'926
	21	2'940	2'930	2'912	2'907	2'889	2'853	2'792	2'750	2'719	2'646	2'638
	22	2'178	2'180	2'172	2'170	2'166	2'161	2'143	2'151	2'162	2'193	2'221
	23	2'324	2'322	2'272	2'246	2'201	2'153	2'074	2'057	2'025	2'014	2'027
	24	2'051	2'063	2'125	2'177	2'215	2'254	2'273	2'300	2'314	2'331	2'350
	25*	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	2'981	3'007	3'006	3'023	3'023	3'007	2'974	2'956	2'940	2'918	2'900
	28	2'658	2'666	2'668	2'671	2'689	2'657	2'644	2'620	2'624	2'637	2'633
	29	2'627	2'611	2'649	2'650	2'663	2'655	2'625	2'615	2'624	2'628	2'632
	30	2'597	2'612	2'626	2'646	2'655	2'645	2'633	2'622	2'622	2'641	2'657
	31	2'750	2'740	2'740	2'745	2'737	2'707	2'689	2'662	2'630	2'630	2'625
Hourly Means	2'6648	2'6724	2'6787	2'6878	2'6902	2'6770	2'6581	2'6432	2'6371	2'6400	2'6486	2'6508

* Christmas Day.

BAROMETRIC PRESSURE.
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'680	2'680	2'680	2'686	2'710	2'714	2'722	2'720	2'722	2'714	2'690	2'690	2'690	2'680	2'676	2'6953
2'550	2'544	2'542	2'536	2'544	2'549	2'553	2'545	2'530	2'526	2'521	2'521	2'499	2'487	2'480	2'5704
2'393	2'403	2'414	2'430	2'434	2'442	2'466	2'472	2'480	2'482	2'504	2'521	2'535	2'542	2'546	2'4589
2'499	2'495	2'499	2'493	2'491	2'506	2'504	2'505	2'525	2'538	2'553	2'557	2'564	2'572	2'582	2'5361
2'631	2'650	2'672	2'696	2'720	2'741	2'756	2'756	2'766	2'786	2'795	2'787	2'785	2'803	2'820	2'6925
2'889	2'876	2'888	2'901	2'889	2'876	2'880	2'871	2'866	—	—	—	—	—	—	2'8199
—	—	—	—	—	—	—	—	—	2'648	2'636	2'627	2'613	2'619	2'605	2'5243
2'540	2'538	2'533	2'536	2'539	2'529	2'523	2'510	2'494	2'468	2'443	2'435	2'405	2'393	2'360	2'5287
2'504	2'520	2'532	2'547	2'553	2'573	2'591	2'597	2'603	2'606	2'659	2'677	2'692	2'709	2'745	2'8446
2'849	2'849	2'844	2'840	2'866	2'870	2'876	2'878	2'860	2'858	2'864	2'856	2'851	2'856	2'860	2'8968
2'895	2'898	2'909	2'918	2'920	2'910	2'914	2'916	2'910	2'898	2'884	2'882	2'868	2'869	2'855	2'7833
2'748	2'746	2'748	2'748	2'760	2'760	2'758	2'762	2'762	2'758	2'754	2'769	2'769	2'777	2'783	2'6281
2'790	2'792	2'748	—	2'724	2'646	2'606	2'571	2'503	2'414	—	—	—	—	—	2'6666
—	—	—	—	—	—	—	—	—	—	2'287	2'281	2'281	2'285	2'287	2'6563
2'632	2'670	2'686	2'711	2'751	2'772	2'782	2'786	2'791	2'797	2'828	2'838	2'836	2'842	2'858	2'6406
2'629	2'605	2'574	2'561	2'559	2'541	2'542	2'552	2'559	2'565	2'556	2'574	2'578	2'592	2'577	2'4187
2'652	2'656	2'664	2'666	2'666	2'650	2'660	2'630	2'646	2'616	2'614	2'634	2'608	2'594	2'561	2'9599
2'367	2'342	2'352	2'314	2'296	2'290	2'297	2'317	2'355	2'369	2'376	2'397	2'415	2'452	2'496	2'8803
2'838	2'870	2'910	2'938	2'968	2'982	2'999	3'015	3'024	3'031	3'048	3'068	3'069	3'065	3'084	2'9599
3'003	2'983	2'967	2'926	2'919	2'889	2'861	2'858	2'860	—	—	—	—	—	—	2'819
—	—	—	—	—	—	—	—	—	2'832	2'832	2'840	2'836	2'828	2'819	2'7955
2'824	2'830	2'825	2'827	2'827	2'813	2'796	2'800	2'790	2'756	2'730	2'702	2'661	2'645	2'611	2'5310
2'453	2'444	2'423	2'407	2'399	2'393	2'358	2'350	2'340	2'340	2'340	2'342	2'346	2'358	2'352	2'3155
2'351	2'335	2'307	2'307	2'297	2'297	2'271	2'248	2'230	2'246	2'222	2'223	2'246	2'253	2'264	2'3557
2'307	2'321	2'344	2'352	2'357	2'367	2'374	2'394	2'406	2'423	2'445	2'455	2'462	2'533	2'558	2'7761
2'803	2'817	2'823	2'837	2'844	2'845	2'845	2'847	2'835	2'846	2'808	2'788	2'774	2'758	2'724	2'7151
2'539	2'552	2'553	2'554	2'586	2'582	2'569	2'551	2'541	3'059	3'079	3'106	3'130	3'138	3'169	3'2045
—	—	—	—	—	—	—	—	—	3'180	3'185	3'187	3'189	3'166	3'156	3'0168
3'221	3'211	3'206	3'206	2'990	2'976	2'962	2'951	2'937	2'929	2'923	2'923	2'891	2'875	2'860	2'6781
3'050	3'041	3'019	—	—	—	—	—	—	—	—	—	—	—	—	2'6543
2'6783	2'6795	2'6793	2'6797	2'6820	2'6795	2'6777	2'6736	2'6702	2'6742	2'6758	2'6800	2'6768	2'6805	2'6822	2'5252
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2'6108
2'691	2'687	2'699	2'685	2'660	2'640	2'628	2'588	2'552	2'510	2'486	2'442	2'414	2'404	2'402	2'6404
2'520	2'530	2'556	2'557	2'575	2'565	2'575	2'581	2'577	2'583	2'575	2'565	2'553	2'547	2'538	2'8078
2'553	2'574	2'586	2'604	2'606	2'610	2'618	2'634	2'640	2'649	2'665	2'681	2'691	2'699	2'716	2'9001
2'625	2'623	2'624	2'612	2'595	2'575	2'541	2'518	2'514	—	—	—	—	—	—	2'7684
—	—	—	—	—	—	—	—	—	2'587	2'595	2'622	2'633	2'651	2'669	2'5105
2'806	2'806	2'816	2'828	2'830	2'832	2'844	2'841	2'847	2'836	2'834	2'845	2'849	2'853	2'856	2'4808
2'906	2'926	2'930	2'938	2'935	2'933	2'932	2'918	2'915	2'905	2'903	2'877	2'857	2'851	2'825	2'7760
2'685	2'694	2'695	2'721	2'751	2'761	2'779	2'793	2'798	2'814	2'802	2'828	2'822	2'826	2'833	2'6811
2'491	2'477	2'443	2'431	2'396	2'392	2'371	2'369	2'367	2'360	2'337	2'347	2'351	2'325	2'339	2'7773
2'448	2'480	2'498	2'532	2'549	2'552	2'577	2'577	2'589	2'567	2'541	2'544	2'550	2'568	2'603	2'6030
2'855	2'880	2'901	2'907	2'941	2'920	2'954	2'972	2'968	—	—	—	—	—	—	2'8523
—	—	—	—	—	—	—	—	—	2'629	2'617	2'629	2'625	2'625	2'621	2'7881
2'735	2'735	2'745	2'771	2'791	2'806	2'807	2'788	2'794	2'758	2'763	2'763	2'732	2'724	2'702	2'6811
2'577	2'589	2'573	2'573	2'564	2'569	2'545	2'541	2'571	2'581	2'579	2'595	2'603	2'607	2'613	2'5773
2'772	2'801	2'829	2'817	2'904	2'926	2'942	2'933	2'966	2'974	3'001	3'038	3'039	3'054	3'072	2'6030
3'061	3'076	3'041	3'035	3'018	2'978	2'974	2'930	2'919	2'903	2'893	2'871	2'854	2'808	2'782	2'8523
2'736	2'766	2'755	2'766	2'780	2'792	2'818	2'830	2'829	2'823	2'823	2'824	2'823	2'814	2'806	3'0016
2'647	2'617	2'587	2'579	2'546	2'524	2'496	2'486	2'456	—	—	—	—	—	—	2'7881
—	—	—	—	—	—	—	—	—	2'709	2'719	2'733	2'742	2'758	2'773	2'6811
2'898	2'926	2'961	2'980	2'990	3'008	3'017	3'008	3'018	3'018	2'997	2'994	2'988	2'971	2'953	2'6030
2'646	2'638	2'586	2'550	2'501	3'491	3'447	3'413	3'384	3'341	2'275	2'255	2'230	2'199	2'186	2'5764
2'193	2'221	2'255	2'291	2'317	3'345	3'349	3'356	3'382	3'358	2'358	2'357	2'349	2'336	2'328	2'6637
2'014	2'027	2'007	2'011	2'011	1'997	1'981	1'954	1'956	1'957	1'967	1'977	2'007	2'015	2'019	2'6793
2'331	2'350	2'357	2'387	2'403	2'399	2'393	2'394	2'400	—	—	—	—	—	—	2'0656
—	—	—	—	—	—	—	—	—	2'915	2'933	2'948	2'954	2'953	2'965	2'4523
2'918	2'900	2'861	2'847	2'831	2'795	2'767	2'731	2'729	2'690	2'660	2'688	2'691	2'659	2'654	2'8474
2'637	2'633	2'653	2'675	2'703	2'714	2'697	2'696	2'692	2'677	2'671	2'663	2'663	2'636	2'636	2'6639
2'624	2'628	2'652	2'658	2'668	2'667	2'665	2'656	2'640	2'638	2'626	2'626	2'614	2'604	2'598	2'6377
2'641	2'657	2'683	2'699	2'709	2'717	2'722	2'726	2'720	2'720	2'718	2'718	2'739	2'747	2'728	2'6793
2'630	2'625	2'627	2'625	2'627	2'608	2'588	2'576	2'562	2'558	2'528	2'504	2'487	2'459	2'447	2'6175
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2'6567
2'6400	2'6486	2'6508	2'6581	2'6615	2'6583	2'6549	2'6465	2'6456	2'6562	2'6487	2'6510	2'6485	2'6420	2'6398	2'6567

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	2'385	2'368	2'348	2'334	2'318	2'276	2'251	2'211	2'193	2'185	2'196	2'229
2	—	—	—	2'640 ^a	—	—	—	—	—	2'607 ^a	—	—
3	2'714	2'720	2'716	2'716	2'716	2'702	2'660	2'632	2'612	2'602	2'604	2'557
4	2'693	2'737	2'793	2'818	2'847	2'876	2'890	2'903	2'929	2'956	2'962	2'962
5	2'752	2'685	2'593	2'509	2'445	2'327	2'185	2'077	2'021	2'022	2'060	2'117
6	2'707	2'712	2'723	2'680	2'698	2'678	2'660	2'645	2'631	2'635	2'639	2'637
7	2'645	2'653	2'672	2'674	2'680	2'650	2'624	2'609	2'604	2'594	2'593	2'570
8	2'329	2'333	2'338	2'344	2'352	2'350	2'334	2'325	2'325	2'354	2'365	2'366
9	—	—	—	2'421	—	—	—	—	—	2'581	—	—
10	2'982	3'003	3'038	3'068	3'092	3'109	3'103	3'109	3'120	3'155	3'172	3'180
11	2'965	2'940	2'895	2'870	2'828	2'785	2'699	2'638	2'636	2'633	2'668	2'700
12	2'938	2'958	2'980	3'022	3'027	3'016	3'001	2'979	2'980	2'980	2'974	2'962
13	2'818	2'804	2'802	2'824	2'793	2'789	2'764	2'747	2'739	2'739	2'745	2'758
14	2'740	2'754	2'768	2'780	2'780	2'766	2'736	2'718	2'708	2'702	2'692	2'688
15	2'366	2'360	2'368	2'374	2'390	2'390	2'377	2'382	2'402	2'442	2'477	2'511
16	—	—	—	2'986	—	—	—	—	—	2'897	—	—
17	2'731	2'815	2'875	2'941	2'978	2'987	2'971	2'961	2'961	2'960	2'942	2'911
18	2'507	2'587	2'653	2'711	2'767	2'836	2'869	2'911	2'953	2'987	3'022	3'061
19	3'259	3'267	3'285	3'298	3'284	3'275	3'215	3'207	3'179	3'161	3'141	3'111
20	2'822	2'811	2'820	2'825	2'820	2'811	2'776	2'758	2'723	2'705	2'695	2'685
21	2'393	2'392	2'379	2'375	2'344	2'347	2'358	2'364	2'410	2'479	2'537	2'577
22	2'824	2'796	2'796	2'801	2'787	2'747	2'690	2'651	2'619	2'595	2'593	2'565
23	—	—	—	2'999	—	—	—	—	—	3'019	—	—
24	3'070	3'071	3'071	3'095	3'092	3'090	3'051	3'030	3'019	3'012	3'005	2'987
25	2'920	2'919	2'919	2'929	2'929	2'908	2'889	2'892	2'884	2'889	2'875	2'877
26	2'699	2'682	2'667	2'619	2'625	2'586	2'542	2'500	2'466	2'451	2'429	2'401
27	2'361	2'362	2'368	2'380	2'378	2'365	2'329	2'313	2'303	2'291	2'273	2'257
28	2'276	2'271	2'271	2'261	2'234	2'214	2'167	2'133	2'098	2'080	2'070	2'061
29	2'356	2'390	2'431	2'526	2'572	2'606	2'695	2'667	2'630	2'610	2'673	2'700
30	—	—	—	2'774	—	—	—	—	—	2'652	—	—
31	2'348	2'330	2'312	2'292	2'248	2'221	2'174	2'143	2'129	2'143	2'157	2'171
Hourly Means	2'6769	2'6815	2'6878	2'6960	2'6933	2'6810	2'6308	2'6325	2'6239	2'6362	2'6470	2'6571
FEBRUARY.	1	2'251	2'258	2'252	2'253	2'257	2'265	2'277	2'286	2'306	2'328	2'341
2	2'428	2'428	2'434	2'452	2'459	2'452	2'443	2'422	2'419	2'418	2'418	2'415
3	2'398	2'406	2'420	2'436	2'446	2'444	2'421	2'405	2'393	2'398	2'396	2'396
4	2'225	2'198	2'182	2'151	2'121	2'085	2'046	2'012	1'982	1'952	1'962	1'962
5	1'963	1'977	2'095	2'003	2'009	2'008	1'996	2'001	2'015	2'030	2'045	2'057
6	—	—	—	2'211 ^a	—	—	—	—	—	2'264	—	—
7	2'543	2'561	2'581	2'600	2'606	2'612	2'604	2'597	2'591	2'589	2'582	2'571
8	2'443	2'495	2'515	2'528	2'542	2'565	2'578	2'592	2'601	2'671	2'679	2'679
9	2'759	2'757	2'748	2'729	2'708	2'650	2'591	2'517	2'441	2'417	2'444	2'471
10	2'638	2'682	2'711	2'732	2'806	2'847	2'800	2'798	2'791	2'789	2'803	2'817
11	3'093	3'117	3'141	3'155	3'160	3'143	3'113	3'091	3'071	3'063	3'064	3'064
12	3'015	3'023	3'037	3'047	3'055	3'078	3'012	3'030	3'017	3'021	3'023	3'023
13	—	—	—	2'985	—	—	—	—	—	2'841	—	—
14	2'625	2'625	2'637	2'634	2'609	2'597	2'590	2'579	2'568	2'570	2'574	2'574
15	2'826	2'842	2'860	2'886	2'894	2'888	2'868	2'851	2'828	2'821	2'806	2'797
16	2'744	2'747	2'772	2'781	2'778	2'768	2'745	2'723	2'718	2'710	2'710	2'710
17	2'679	2'698	2'714	2'727	2'726	2'736	2'755	2'793	2'798	2'796	2'771	2'771
18	2'821	2'846	2'854	2'859	2'850	2'844	2'831	2'812	2'789	2'783	2'779	2'779
19	2'596	2'600	2'597	2'589	2'566	2'531	2'509	2'487	2'439	2'434	2'428	2'428
20	—	—	—	1'957	—	—	—	—	—	1'897	—	—
21	2'298	2'356	2'394	2'445	2'468	2'491	2'509	2'510	2'517	2'558	2'561	2'577
22	2'587	2'601	2'586	2'582	2'583	2'546	2'528	2'500	2'500	2'486	2'486	2'486
23	2'552	2'588	2'608	2'627	2'631	2'635	2'625	2'630	2'648	2'677	2'682	2'687
24	2'890	2'890	2'910	2'921	2'923	2'921	2'909	2'889	2'875	2'874	2'876	2'876
25	3'091	3'109	3'118	3'120	3'119	3'120	3'106	3'086	3'066	3'053	3'051	3'051
26	2'918	2'920	2'902	2'883	2'852	2'827	2'789	2'744	2'694	2'656	2'636	2'636
27	—	—	—	2'645	—	—	—	—	—	2'736	—	—
28	2'487	2'467	2'399	2'359	2'299	2'267	2'244	2'184	2'170	2'171	2'175	2'185
29	2'280	2'304	2'328	2'340	2'360	2'367	2'379	2'385	2'399	2'423	2'445	2'457
Hourly Means	2'6078	2'6198	2'6286	2'6337	2'6330	2'6267	2'6120	2'5970	2'5838	2'5849	2'5860	2'5890

^a The Observations made at 9 a.m. and 3 p.m. on Sunday are for the first time given in this Abstract: they are not included in the Means.

BAROMETRIC PRESSURE.
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'185	2'196	2'229	2'241	2'300	2'301	2'370	2'368	2'388	—	2'678	2'706	2'728	2'728	2'714	2'724
2'607	2'604	2'587	2'581	2'573	2'573	2'559	2'575	2'575	2'581	2'591	2'617	2'619	2'642	2'661	2'6303
2'956	2'962	2'982	2'990	3'000	3'002	2'979	2'981	2'956	2'954	2'920	2'904	2'868	2'816	2'804	2'8983
2'022	2'060	2'117	2'226	2'257	2'323	2'397	2'471	2'507	2'524	2'550	2'576	2'614	2'610	2'701	2'3987
2'635	2'639	2'687	2'616	2'650	2'652	2'652	2'650	2'644	2'622	2'644	2'653	2'653	2'651	2'645	2'6586
2'594	2'593	2'570	2'579	2'554	2'549	2'518	2'510	2'490	2'480	2'430	2'414	2'384	2'365	2'345	2'5498
2'354	2'365	2'366	2'342	2'321	2'351	2'330	2'298	2'248	—	2'859	2'881	2'907	2'925	2'933	2'958
2'584	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2'4777
3'155	3'172	3'180	3'186	3'186	3'180	3'172	3'144	3'144	3'118	3'100	3'072	3'044	3'021	3'014	3'1047
2'633	2'668	2'701	2'743	2'776	2'790	2'788	2'794	2'817	2'830	2'848	2'880	2'908	2'893	2'908	2'8015
2'980	2'974	2'972	2'936	2'957	2'952	2'934	2'918	2'906	2'896	2'876	2'866	2'853	2'840	2'823	2'9418
2'739	2'745	2'758	2'748	2'747	2'747	2'747	2'744	2'742	2'740	2'740	2'742	2'741	2'729	2'734	2'7585
2'702	2'692	2'680	2'672	2'659	2'647	2'613	2'575	2'546	2'496	2'486	2'456	2'448	2'406	2'368	2'6332
2'442	2'477	2'511	2'601	2'639	2'703	2'746	2'761	2'800	—	—	—	—	—	—	2'5393
2'897	—	—	2'904	2'874	2'844	2'805	2'775	2'721	2'639	2'632	2'632	2'622	2'634	2'642	2'8053
2'900	2'912	2'911	3'000	3'122	3'133	3'143	3'148	3'156	2'649	2'638	2'567	2'517	2'501	2'495	2'9949
2'987	3'022	3'061	3'076	3'050	3'026	2'986	2'952	2'896	2'862	2'858	2'868	2'853	2'825	2'814	3'0732
3'161	3'144	3'163	2'671	2'653	2'661	2'613	2'587	2'565	2'544	2'531	2'515	2'481	2'457	2'426	2'6647
2'705	2'695	2'673	2'695	2'692	2'670	2'712	2'724	2'751	2'778	2'785	2'811	2'824	2'823	2'825	2'5786
2'479	2'537	2'578	2'603	2'619	2'668	2'688	2'691	2'697	—	—	—	—	—	—	2'7901
2'595	2'593	2'621	2'689	2'985	2'972	2'968	2'964	2'964	2'943	2'944	2'944	2'926	2'926	2'926	3'0022
3'019	—	2'965	2'872	2'887	2'889	2'878	2'860	2'840	2'820	2'802	2'800	2'776	2'750	2'724	2'8636
3'012	3'005	2'965	2'901	2'907	2'890	2'880	2'863	2'873	2'873	2'885	2'883	2'883	2'865	2'855	2'4701
2'889	2'875	2'865	2'901	2'903	2'890	2'880	2'863	2'873	2'873	2'885	2'883	2'883	2'865	2'855	2'2848
2'454	2'429	2'416	2'903	2'903	2'890	2'880	2'863	2'873	2'873	2'885	2'883	2'883	2'865	2'855	2'1597
2'291	2'273	2'271	2'903	2'903	2'890	2'880	2'863	2'873	2'873	2'885	2'883	2'883	2'865	2'855	2'5840
2'030	2'070	2'059	2'057	2'057	2'059	2'071	2'091	2'132	2'148	2'167	2'193	2'211	2'216	2'296	2'2474
2'610	2'670	2'680	2'723	2'747	2'766	2'776	2'790	2'800	—	—	—	—	—	—	2'2901
2'652	—	—	2'202	2'244	2'265	2'274	2'298	2'301	2'290	2'288	2'296	2'294	2'271	2'251	2'6657
2'133	2'157	2'175	2'637	2'6610	2'6675	2'6673	2'6618	2'6606	2'6830	2'6816	2'6839	2'6774	2'6675	2'6701	2'6657
2'6302	2'6370	2'641	2'632	2'396	2'403	2'427	2'427	2'428	2'432	2'440	2'442	2'430	2'429	2'425	2'3541
2'328	2'340	2'341	2'429	2'420	2'420	2'408	2'397	2'388	2'376	2'376	2'376	2'384	2'376	2'374	2'1166
2'418	2'425	2'427	2'400	2'398	2'393	2'376	2'365	2'364	2'346	2'336	2'318	2'293	2'275	2'215	2'3774
2'538	2'566	2'577	1'926	1'925	1'944	1'950	1'964	1'978	1'991	1'986	1'976	1'973	1'937	1'967	2'0138
1'952	1'962	1'968	2'030	2'046	2'088	2'076	2'079	2'067	—	—	—	—	—	—	2'1433
2'030	2'046	2'060	2'070	2'084	2'088	2'076	2'079	2'067	2'428	2'450	2'472	2'494	2'508	2'522	2'5598
2'589	2'582	2'581	2'579	2'571	2'571	2'551	2'533	2'536	2'536	2'531	2'523	2'500	2'481	2'476	2'6671
2'671	2'649	2'681	2'702	2'728	2'742	2'754	2'766	2'762	2'772	2'775	2'778	2'774	2'776	2'779	2'5533
2'417	2'431	2'436	2'428	2'446	2'472	2'475	2'486	2'500	2'514	2'522	2'537	2'547	2'570	2'599	2'8747
2'789	2'803	2'817	2'856	2'887	2'909	2'940	2'952	2'986	3'000	3'025	3'046	3'047	3'051	3'089	3'0558
3'063	3'064	3'074	3'045	3'045	3'020	3'011	3'010	3'006	2'992	2'982	2'988	2'984	2'985	3'005	2'9385
3'021	3'023	3'029	3'035	3'035	3'043	3'042	3'039	3'039	—	—	—	—	—	—	2'6567
2'841	—	—	2'922	2'644	2'666	2'686	2'691	2'706	2'725	2'731	2'746	2'767	2'785	2'793	2'8041
2'570	2'574	2'593	2'781	2'774	2'768	2'766	2'767	2'770	2'763	2'751	2'737	2'740	2'752	2'752	2'7112
2'821	2'806	2'817	2'699	2'702	2'700	2'702	2'700	2'678	2'662	2'662	2'658	2'666	2'666	2'662	2'7606
2'710	2'710	2'714	2'757	2'758	2'772	2'780	2'800	2'810	2'816	2'805	2'806	2'806	2'810	2'823	2'7568
2'736	2'744	2'753	2'773	2'755	2'753	2'734	2'724	2'706	2'683	2'673	2'652	2'638	2'637	2'616	2'3852
2'783	2'779	2'771	2'765	2'786	2'791	2'752	2'736	2'720	—	—	—	—	—	—	2'5475
2'434	2'428	2'421	2'693	2'611	2'617	2'613	2'619	2'627	2'628	2'630	2'627	2'623	2'605	2'596	2'5180
1'897	—	—	2'470	2'468	2'474	2'466	2'470	2'464	2'464	2'501	2'519	2'518	2'527	2'550	2'7150
2'558	2'564	2'571	2'702	2'728	2'754	2'752	2'761	2'771	2'787	2'807	2'860	2'868	2'876	2'895	2'9512
2'186	2'186	2'197	2'624	2'627	2'626	2'628	2'628	2'628	2'628	2'628	2'628	2'628	2'628	2'628	2'628
2'677	2'682	2'697	3'024	3'037	3'036	3'028	3'017	3'015	3'002	2'991	2'985	2'977	2'962	2'949	2'9042
2'874	2'876	2'882	2'656	2'636	2'617	2'612	2'611	2'607	—	—	—	—	—	—	2'6985
3'053	3'051	3'050	2'195	2'199	2'199	2'199	2'173	2'173	2'171	2'181	2'198	2'217	2'230	2'262	2'2120
2'656	2'636	2'615	2'479	2'504	2'528	2'555	2'561	2'567	2'565	2'575	2'581	2'591	2'600	2'635	2'4655
2'5849	2'5860	2'5860	2'5946	2'6032	2'6083	2'6088	2'6087	2'6092	2'6041	2'6076	2'6115	2'6114	2'6122	2'6188	2'6084

t included in the Means.

BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Gaiting Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1 2'663	2'700	2'723	2'742	2'762	2'765	2'766	2'749	2'747	2'755	2'764	2'811
	2 3'022	3'020	3'026	3'017	3'015	3'002	2'982	2'946	2'921	2'891	2'886	2'856
	3 2'445	2'445	2'415	2'423	2'412	2'407	2'395	2'379	2'376	2'396	2'438	2'486
	4 2'818	2'816	2'839	2'833	2'840	2'818	2'785	2'737	2'689	2'676	2'646	2'623
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 2'597	2'611	2'612	2'615	2'614	2'608	2'600	2'600	2'595	2'603	2'619	2'626
	7 2'704	2'712	2'696	2'683	2'650	2'642	2'579	2'534	2'482	2'450	2'421	2'390
	8 2'245	2'227	2'225	2'203	2'173	2'164	2'139	2'114	2'127	2'125	2'207	2'216
	9 2'642	2'684	2'692	2'708	2'712	2'723	2'720	2'688	2'696	2'665	2'666	2'666
	10 2'517	2'508	2'526	2'517	2'495	2'492	2'488	2'459	2'453	2'458	2'482	2'507
	11 2'700	2'714	2'731	2'744	2'746	2'749	2'747	2'741	2'722	2'714	2'713	2'716
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 2'570	2'591	2'608	2'622	2'634	2'640	2'656	2'653	2'668	2'692	2'713	2'731
	14 2'768	2'782	2'781	2'775	2'768	2'752	2'736	2'731	2'732	2'740	2'759	2'783
	15 2'922	2'938	2'970	2'976	2'970	2'960	2'947	2'927	2'906	2'905	2'912	2'929
	16 2'951	2'960	2'956	2'949	2'946	2'931	2'905	2'857	2'817	2'792	2'774	2'764
	17 2'660	2'659	2'670	2'689	2'671	2'652	2'635	2'631	2'614	2'591	2'576	2'554
	18 2'429	2'431	2'417	2'429	2'426	2'423	2'418	2'400	2'405	2'414	2'394	2'415
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 2'692	2'686	2'700	2'629	2'604	2'615	2'570	2'486	2'442	2'356	2'335	2'292
	21 2'348	2'416	2'436	2'458	2'473	2'501	2'504	2'520	2'517	2'533	2'544	2'556
	22 2'712	2'716	2'723	2'734	2'725	2'723	2'708	2'700	2'685	2'661	2'653	2'641
	23 2'734	2'756	2'778	2'782	2'802	2'792	2'827	2'828	2'806	2'808	2'810	2'815
	24 2'924	2'942	2'952	2'962	2'954	2'935	2'948	2'920	2'903	2'896	2'906	2'896
	25 2'734	2'728	2'716	2'691	2'669	2'645	2'611	2'607	2'586	2'551	2'541	2'536
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 2'565	2'575	2'569	2'581	2'589	2'577	2'572	2'566	2'563	2'542	2'553	2'559
	28 2'724	2'739	2'752	2'778	2'761	2'760	2'750	2'726	2'697	2'697	2'707	2'698
	29 2'790	2'804	2'805	2'804	2'799	2'800	2'802	2'802	2'795	2'792	2'790	2'807
	30 2'928	2'940	2'941	2'919	2'894	2'874	2'840	2'806	2'763	2'726	2'698	2'673
	31 2'412	2'403	2'377	2'341	2'298	2'238	2'195	2'183	2'163	2'161	2'156	2'158
Hourly Means	2'6760	2'6864	2'6903	2'6890	2'6817	2'6726	2'6620	2'6413	2'6259	2'6116	2'6171	2'6171
APRIL.	1 2'571	2'629	2'659	2'704	2'725	2'733	2'752	2'761	2'812	2'831	2'860	2'876
	2 —	—	—	—	—	—	—	—	—	—	—	—
	3 3'038	3'056	3'059	3'071	3'062	3'045	3'024	3'001	2'956	2'908	2'920	2'889
	4 2'715	2'750	2'750	2'758	2'760	2'748	2'736	2'734	2'730	2'710	2'714	2'751
	5 2'954	2'967	2'984	2'992	2'984	2'970	2'955	2'944	2'934	2'912	2'904	2'882
	6 2'870	2'873	2'872	2'862	2'861	2'855	2'838	2'819	2'796	2'774	2'765	2'765
	7 2'843	2'849	2'858	2'886	2'889	2'885	2'867	2'865	2'855	2'833	2'826	2'799
	8 2'774	2'792	2'780	2'771	2'754	2'733	2'706	2'685	2'660	2'649	2'638	2'631
	9 —	—	—	—	—	—	—	—	—	—	—	—
	10 2'633	2'658	2'640	2'626	2'621	2'600	2'582	2'566	2'547	2'524	2'508	2'500
	11 2'590	2'618	2'672	2'638	2'636	2'644	2'632	2'656	2'661	2'628	2'640	2'638
	12 2'801	2'792	2'777	2'751	2'740	2'709	2'662	2'625	2'595	2'563	2'520	2'504
	13 2'337	2'351	2'330	2'325	2'307	2'307	2'307	2'311	2'341	2'351	2'363	2'377
	14 2'446	2'458	2'487	2'503	2'511	2'531	2'541	2'552	2'556	2'556	2'565	2'544
	15 2'648	2'667	2'676	2'688	2'673	2'666	2'650	2'656	2'647	2'642	2'635	2'636
	16 —	—	—	—	—	—	—	—	—	—	—	—
	17 2'952	2'960	2'962	2'962	2'962	2'950	2'934	2'905	2'887	2'883	2'877	2'861
	18 2'784	2'771	2'761	2'751	2'759	2'770	2'788	2'804	2'802	2'801	2'819	2'845
	19 3'030	3'038	3'069	3'089	3'088	3'082	3'061	3'069	3'060	3'041	3'028	3'022
	20 2'976	2'974	2'974	2'955	2'935	2'904	2'848	2'812	2'776	2'730	2'699	2'694
	21 —	—	—	—	—	—	—	—	—	—	—	—
	22 2'599	2'619	2'635	2'643	2'659	2'651	2'652	2'645	2'633	2'620	2'614	2'621
	23 —	—	—	—	—	—	—	—	—	—	—	—
	24 2'429	2'439	2'459	2'459	2'451	2'494	2'488	2'498	2'515	2'529	2'535	2'531
	25 2'684	2'686	2'689	2'701	2'697	2'682	2'633	2'617	2'580	2'561	2'540	2'536
	26 2'725	2'748	2'756	2'768	2'779	2'777	2'775	2'781	2'777	2'777	2'787	2'798
	27 2'949	2'963	2'978	2'989	2'994	2'979	2'963	2'946	2'934	2'916	2'923	2'909
	28 2'911	2'916	2'916	2'902	2'862	2'850	2'830	2'790	2'740	2'715	2'674	2'659
	29 2'471	2'523	2'582	2'638	2'670	2'704	2'726	2'752	2'769	2'779	2'788	2'806
	30 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'7404	2'7540	2'7639	2'7681	2'7658	2'7618	2'7487	2'7415	2'7318	2'7205	2'7155	2'7140

* Good Friday.

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'755	2'764	2'811	2'837	2'873	2'873	2'918	2'935	2'936	2'940	2'960	2'966	2'998	—	3'003	2'8342
2'894	2'886	2'856	2'833	2'797	2'769	2'749	2'706	2'665	2'629	2'583	2'537	2'503	2'479	2'475	2'8045
2'396	2'438	2'486	2'534	2'599	2'638	2'669	2'703	2'735	2'757	2'770	2'782	2'796	821	2'844	2'5694
2'676	2'646	2'623	2'612	2'602	2'575	2'565	2'557	2'538	—	—	—	—	—	—	2'6852
2'603	2'619	2'626	2'631	2'669	2'682	2'701	2'710	2'714	2'718	2'731	2'723	2'695	2'694	2'704	2'6534
2'450	2'421	2'390	2'384	2'375	2'379	2'370	2'366	2'378	2'368	2'366	2'346	2'340	2'320	2'271	2'4657
2'125	2'207	2'216	2'211	2'213	2'249	2'285	2'403	2'418	2'433	2'487	2'514	2'535	2'573	2'596	2'3088
2'665	2'666	2'666	2'661	2'673	2'665	2'662	2'622	2'608	2'581	2'561	2'561	2'561	2'528	2'530	2'6448
2'458	2'482	2'507	2'521	2'538	2'574	2'595	2'597	2'598	2'597	2'621	2'636	2'655	2'663	2'680	2'5492
2'714	2'713	2'716	2'709	2'712	2'712	2'718	2'715	2'711	—	—	—	—	—	—	2'6613
2'692	2'713	2'731	2'751	2'770	2'774	2'776	2'776	2'768	2'769	2'771	2'773	2'755	2'759	2'760	2'7075
2'740	2'759	2'783	2'798	2'824	2'827	2'849	2'850	2'852	2'860	2'862	2'862	2'867	2'880	2'893	2'8056
2'905	2'912	2'929	2'945	2'919	2'937	2'953	2'945	2'950	2'946	2'940	2'946	2'946	2'942	2'951	2'9430
2'792	2'774	2'766	2'742	2'745	2'738	2'728	2'726	2'738	2'742	2'726	2'695	2'674	2'652	2'656	2'7987
2'591	2'576	2'554	2'551	2'546	2'506	2'491	2'486	2'472	2'466	2'467	2'444	2'426	2'412	2'429	2'5528
2'414	2'394	2'415	2'431	2'454	2'490	2'504	2'532	2'530	—	—	—	—	—	—	2'5076
2'356	2'335	2'372	2'342	2'319	2'247	2'170	2'188	2'200	2'210	2'210	2'210	2'216	2'248	2'258	2'3737
2'533	2'544	2'596	2'600	2'635	2'652	2'675	2'674	2'692	2'690	2'692	2'678	2'671	2'675	2'688	2'5766
2'661	2'653	2'641	2'649	2'617	2'646	2'654	2'664	2'666	2'666	2'670	2'689	2'678	2'691	2'708	2'6800
2'808	2'810	2'845	2'821	2'830	2'849	2'846	2'845	2'856	2'854	2'857	2'859	2'876	2'890	2'913	2'8264
2'896	2'906	2'863	2'889	2'887	2'859	2'840	2'824	2'818	2'790	2'796	2'773	2'753	2'744	2'754	2'8694
2'551	2'541	2'563	2'588	2'564	2'456	2'452	2'425	2'425	—	—	—	—	—	—	2'5618
2'542	2'553	2'560	2'574	2'594	2'623	2'635	2'628	2'632	2'640	2'648	2'654	2'673	2'684	2'702	2'6047
2'697	2'707	2'698	2'698	2'683	2'675	2'658	2'650	2'668	2'667	2'681	2'705	2'701	2'709	2'741	2'7122
2'792	2'790	2'807	2'815	2'847	2'857	2'866	2'904	2'911	2'912	2'899	2'900	2'926	2'929	2'917	2'8455
2'726	2'698	2'673	2'653	2'634	2'584	2'545	2'543	2'490	2'499	2'493	2'470	2'458	2'438	2'420	2'6753
2'161	2'156	2'158	2'147	2'141	2'108	2'130	2'196	2'251	2'339	2'380	2'445	2'417	2'463	2'495	2'2720
2'616	2'617	2'617	2'646	2'670	2'6298	2'6342	2'6348	2'6379	2'6450	2'6495	2'6487	2'6474	2'6362	2'6570	2'6476
2'831	2'860	2'876	2'895	2'907	2'927	2'929	2'951	2'972	—	—	—	—	—	—	2'8624
2'938	2'920	2'889	2'865	2'861	2'867	2'860	2'850	2'848	2'838	3'005	3'031	3'026	3'036	3'035	2'9152
2'740	2'744	2'744	2'748	2'788	2'797	2'837	2'829	2'834	2'856	2'856	2'856	2'870	2'892	2'925	2'7936
2'912	2'901	2'882	2'882	2'900	2'903	2'896	2'896	2'888	2'874	2'859	2'869	2'863	2'866	2'866	2'9143
2'774	2'765	2'765	2'768	2'778	2'801	2'807	2'809	2'802	2'814	2'804	2'814	2'813	2'813	2'826	2'8166
2'833	2'826	2'790	2'793	2'796	2'806	2'793	2'783	2'777	2'784	2'788	2'807	2'790	2'777	2'770	2'8234
2'649	2'638	2'631	2'628	2'624	2'625	2'627	2'626	2'626	—	—	—	—	—	—	2'6654
2'524	2'508	2'500	2'492	2'527	2'543	2'551	2'554	2'548	2'557	2'551	2'547	2'543	2'550	2'578	2'5644
2'628	2'610	2'608	2'632	2'658	2'668	2'668	2'704	2'714	2'730	2'746	2'757	2'761	2'770	2'767	2'6790
2'563	2'520	2'504	2'470	2'457	2'442	2'440	2'402	2'370	2'347	2'313	2'291	2'297	2'306	2'322	2'5202
2'351	2'360	2'357	2'363	2'401	2'419	2'448	2'449	2'446	2'447	2'445	2'445	2'424	2'425	2'426	2'3748
2'556	2'565	2'584	2'592	2'601	2'613	2'607	2'610	2'612	2'610	2'592	2'585	2'602	2'608	2'628	2'5646
2'642	2'635	2'636	2'642	2'648	2'657	2'666	2'677	2'693	—	—	—	—	—	—	2'7125
2'883	2'877	2'861	2'853	2'845	2'853	2'829	2'846	2'806	2'792	2'791	2'776	2'789	2'775	2'776	2'8666
2'801	2'819	2'845	2'871	2'889	2'924	2'928	2'936	2'940	2'950	2'940	2'955	2'972	2'978	2'981	2'8637
3'041	3'028	3'022	3'013	3'011	3'014	3'012	3'011	3'005	3'004	2'990	2'990	2'986	2'980	2'966	3'0273
2'730	2'699	2'694	2'693	2'657	2'692	2'694	2'693	2'691	—	—	—	—	—	—	2'7282
2'620	2'614	2'621	2'620	2'626	2'617	2'641	2'638	2'646	—	—	—	—	—	—	2'5661
2'529	2'535	2'551	2'561	2'563	2'575	2'588	2'610	2'619	2'620	2'630	2'661	2'676	2'688	2'695	2'5478
2'561	2'540	2'536	2'522	2'491	2'481	2'479	2'475	2'503	2'533	2'577	2'605	2'636	2'637	2'654	2'5943
2'777	2'787	2'798	2'802	2'811	2'826	2'840	2'842	2'852	2'853	2'864	2'874	2'895	2'905	2'925	2'8140
2'916	2'924	2'909	2'900	2'913	2'911	2'918	2'932	2'934	2'918	2'918	2'914	2'916	2'915	2'919	2'9358
2'715	2'674	2'659	2'639	2'588	2'534	2'549	2'536	2'482	2'462	2'444	2'425	2'433	2'433	2'437	2'6553
2'779	2'788	2'806	2'806	2'802	2'857	2'861	2'863	2'876	—	—	—	—	—	—	2'7373
2'705	2'715	2'710	2'713	2'7168	2'7248	2'7274	2'7276	2'7273	2'7079	2'7069	2'7082	2'7137	2'7168	2'7263	2'7310

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table

[illegible]

STANDARD THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	1	28°5	29°2	29°6	30°8	31°6	32°9	32°4	32°7	32°2	32°1	33°2
	2	36°4	36°5	37°2	37°6	39°0	37°9	36°7	36°7	36°3	35°9	35°5
	3	29°9	30°3	30°3	31°1	31°8	33°9	35°0	35°5	35°9	35°9	35°6
	4	—	—	—	—	—	—	—	—	—	—	—
	5	28°1	28°3	27°6	29°9	32°7	32°7	31°3	35°7	35°7	35°1	34°8
	6	26°5	30°1	30°6	32°0	32°9	33°6	31°4	31°1	31°1	31°5	32°8
	7	31°7	34°7	35°0	35°9	36°0	36°5	36°7	36°6	36°2	36°5	35°6
	8	33°5	33°9	31°1	31°1	33°9	31°1	33°9	33°8	31°1	33°9	33°5
	9	28°4	28°0	27°1	27°5	27°9	27°5	27°2	28°6	29°1	29°1	30°2
	10	29°2	30°1	30°3	30°6	30°6	30°7	30°8	32°0	31°8	31°2	29°9
	11	—	—	—	—	—	—	—	—	—	—	—
	12	25°0	25°0	24°9	24°6	24°6	26°1	26°7	27°1	26°7	25°3	24°1
	13	9°5	9°7	12°0	13°0	17°8	20°6	23°5	24°1	24°3	24°0	24°1
	14	28°1	28°1	27°8	28°7	29°9	32°0	33°3	33°9	34°8	35°0	34°6
	15	18°4	24°5	28°7	32°0	31°1	35°1	37°3	29°0	40°1	40°5	38°1
	16	30°6	31°0	31°1	31°1	31°8	31°8	29°9	28°4	28°0	26°7	26°1
	17	11°6	10°7	9°7	8°8	10°1	10°5	10°5	10°0	10°9	12°5	10°3
	18	—	—	—	—	—	—	—	—	—	—	—
	19	7°1	6°9	6°9	8°1	11°6	13°1	14°8	14°8	15°2	15°8	16°2
	20	9°5	9°5	9°7	10°9	14°5	15°2	17°3	20°0	21°6	22°0	22°1
	21	21°9	22°1	22°3	22°0	21°7	22°7	22°7	23°2	24°6	25°1	25°6
	22	—0°7	—0°2	—0°8	—2°7	—6°1	—9°5	—12°1	—16°6	—18°8	—18°9	—18°8
	23	6°6	6°0	4°9	5°5	13°9	17°1	19°2	20°2	20°8	21°9	22°3
	24	20°2	19°2	20°8	22°9	26°3	29°0	31°0	31°1	32°9	34°9	34°7
	25	—	—	—	—	—	—	—	—	—	—	—
	26	33°9	34°3	34°7	35°1	38°8	38°6	37°0	37°5	37°5	37°5	36°6
	27	18°2	15°8	15°0	17°0	18°5	20°1	21°9	22°7	23°2	23°7	22°7
	28	31°2	31°9	32°5	32°7	33°7	35°8	36°8	36°8	37°9	37°3	35°9
	29	33°5	34°0	34°1	34°1	35°1	36°2	37°3	36°8	35°8	35°2	35°6
	30	37°2	37°1	36°3	37°8	39°1	38°8	39°5	41°0	41°2	40°8	40°6
	31	18°1	15°8	14°1	12°2	12°0	14°1	16°7	16°7	19°5	19°9	19°7
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	23°55	23°81	23°96	24°96	26°55	27°67	28°50	29°12	29°61	29°68	29°22	28°5
FEBRUARY.	2	19°2	21°5	21°9	23°7	26°0	28°1	29°3	29°9	30°2	30°2	29°9
	3	29°7	30°7	32°7	36°2	36°8	38°1	39°1	39°8	41°3	40°8	40°2
	4	28°8	29°0	29°2	30°6	31°8	33°3	34°1	35°2	36°0	36°0	35°2
	5	34°9	36°1	35°5	38°6	39°1	38°6	38°1	39°5	38°6	37°2	35°8
	6	24°0	24°1	27°1	29°0	31°1	36°2	38°6	38°3	38°9	39°0	38°6
	7	25°5	24°8	25°0	34°3	37°5	39°7	39°5	39°1	38°1	37°1	37°8
	8	—	—	—	—	—	—	—	—	—	—	—
	9	17°3	13°2	12°1	11°9	12°0	12°2	13°3	13°9	15°1	15°0	15°2
	10	3°6	4°5	4°9	9°3	13°1	15°6	21°6	21°9	22°3	21°8	21°8
	11	21°3	22°9	19°8	18°6	19°2	18°1	18°1	18°6	19°2	18°8	18°2
	12	—2°8	—5°2	—5°1	—5°9	10°2	13°0	16°2	18°9	21°2	22°2	20°9
	13	24°7	25°5	27°0	29°1	31°1	32°2	33°1	33°7	34°7	35°2	35°0
	14	15°6	18°6	21°1	23°8	27°2	32°2	34°0	34°1	34°5	33°7	32°1
	15	—	—	—	—	—	—	—	—	—	—	—
	16	21°1	21°3	21°5	21°7	23°5	26°5	26°1	26°9	26°3	26°1	25°7
	17	18°1	19°2	20°2	23°6	25°9	28°6	30°1	29°7	30°1	31°0	29°7
	18	10°7	11°3	15°6	16°6	23°6	24°2	25°3	26°1	26°9	27°6	26°7
	19	6°1	11°8	14°6	19°6	27°2	27°7	28°3	29°2	28°9	26°9	28°2
	20	24°5	24°7	25°1	25°9	26°3	26°5	26°3	26°8	28°1	30°3	29°7
	21	25°5	26°1	27°1	28°8	30°6	31°0	31°6	30°8	29°0	29°9	28°6
	22	—	—	—	—	—	—	—	—	—	—	—
	23	12°1	15°1	16°6	21°1	23°8	24°7	25°1	24°7	25°1	25°1	23°6
	24	11°6	10°2	12°6	15°6	17°3	18°0	22°7	23°8	20°1	18°8	16°1
	25	—0°3	—1°8	—3°6	—7°8	—10°9	—14°1	—16°6	—16°1	—17°2	—16°5	—15°5
	26	—11°2	—9°8	—5°6	—0°8	—1°9	—3°9	—5°8	—7°2	—8°1	—7°1	—6°0
	27	—12°1	—3°1	—9°5	—1°1	—7°0	—11°3	—14°0	—15°2	—15°8	—15°0	—13°0
	28	11°3	11°8	12°1	14°9	16°7	18°3	18°5	17°7	18°1	19°1	18°5
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	15°04	16°10	16°75	20°27	23°15	24°68	26°11	26°58	26°05	26°90	26°26	25°08

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
32°4	33°2	31°2	31°6	33°0	33°4	33°2	33°6	33°8	33°6	33°4	33°4	33°8	36°2	37°3	33°63
35°0	35°5	35°1	35°4	34°4	33°1	32°8	32°5	32°4	29°6	29°2	29°0	29°0	28°8	29°5	34°03
35°0	35°6	35°3	31°9	31°5	34°2	33°3	32°4	31°6	—	—	—	—	—	—	32°99
—	—	—	—	—	—	—	—	—	32°7	33°8	33°7	31°9	31°6	26°7	29°79
35°1	31°8	33°1	30°8	28°4	28°2	28°8	29°0	28°2	28°0	25°9	25°1	24°4	23°6	26°3	33°15
34°5	32°8	32°7	33°5	34°7	31°1	33°7	33°1	33°1	33°5	33°9	33°9	34°7	34°7	33°7	35°37
36°5	35°6	35°0	34°7	34°7	35°2	35°2	34°9	35°1	35°2	36°1	35°4	35°1	34°1	33°8	31°88
33°9	33°5	33°1	32°3	32°0	30°8	30°1	29°8	29°8	29°5	29°2	29°0	29°1	29°0	28°5	28°89
29°1	30°2	30°7	31°0	30°0	29°6	29°2	28°7	28°6	28°6	28°6	28°4	29°2	29°9	29°0	29°48
31°2	29°0	29°5	29°5	29°9	30°3	30°4	31°2	31°0	—	—	—	—	—	—	29°48
—	—	—	—	—	—	—	—	—	27°4	27°1	26°6	26°1	26°1	25°3	29°48
25°3	24°1	23°7	22°6	22°0	21°1	19°9	18°3	16°4	14°8	14°3	13°7	13°3	12°0	10°5	20°96
24°0	23°1	22°1	20°2	16°3	22°2	22°8	22°5	22°7	24°2	24°4	25°9	26°9	27°4	28°5	21°13
35°0	34°6	35°5	31°3	26°3	25°0	29°5	28°6	28°4	25°9	20°4	22°1	20°0	19°4	18°8	28°11
40°5	38°1	38°8	40°0	40°0	39°5	37°2	38°2	37°1	36°6	35°8	34°3	33°7	32°4	30°6	35°11
26°7	26°1	17°1	21°8	21°3	23°3	22°3	21°5	20°0	19°0	17°5	15°8	15°4	13°4	11°6	21°21
12°5	10°3	9°2	8°0	8°8	8°0	7°4	6°0	4°3	—	—	—	—	—	—	9°18
15°8	16°2	11°3	12°1	11°6	10°1	8°9	8°0	7°0	5°7	5°9	7°2	7°3	7°5	8°2	10°20
22°0	22°0	22°1	21°9	22°9	23°3	25°0	24°7	24°7	21°8	21°9	21°9	22°1	22°3	21°9	19°53
25°1	25°6	25°1	24°2	24°0	20°6	17°1	13°5	11°6	8°8	6°0	3°3	1°2	1°0	0°4	17°05
18°9	18°8	17°1	15°4	14°5	13°7	13°2	13°0	12°6	9°7	12°1	7°7	6°5	4°4	2°9	10°22
21°9	22°4	20°8	20°0	18°8	18°2	16°5	16°0	14°9	13°3	11°8	11°4	15°9	16°4	17°3	15°58
31°9	31°7	33°1	32°7	31°0	31°4	32°2	32°0	33°5	—	—	—	—	—	—	30°15
—	—	—	—	—	—	—	—	—	32°4	31°8	31°6	31°6	33°1	33°5	32°28
37°5	36°6	37°1	33°9	33°1	31°8	31°1	30°6	29°7	28°4	28°2	26°9	23°4	21°3	19°2	32°04
23°7	22°7	23°4	22°7	25°3	27°8	26°9	28°0	29°2	29°5	28°8	29°0	29°2	29°0	30°4	34°04
37°3	35°9	35°2	31°9	34°5	34°7	34°0	33°7	33°3	33°1	31°7	31°9	32°2	32°4	33°1	35°92
35°2	35°6	35°6	36°1	36°4	36°4	37°1	36°3	36°2	36°4	37°1	36°1	36°7	36°1	36°7	36°30
40°8	40°6	39°1	29°9	39°8	40°9	40°2	38°2	36°9	36°0	33°0	28°8	25°2	22°3	19°6	15°85
19°9	19°7	19°0	17°5	15°3	14°2	13°7	11°6	10°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	16°9	17°6	15°4	16°0	16°0	17°7	—
20°68	19°22	28°5	27°95	27°31	27°15	26°80	26°22	25°72	24°93	24°72	24°02	23°71	23°27	22°91	26°26
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30°2	29°9	29°7	29°5	29°9	29°9	31°4	32°0	31°8	30°6	30°3	30°8	31°0	31°2	29°9	28°66
40°8	40°2	40°0	38°6	38°0	36°8	35°4	35°2	33°6	32°4	31°9	31°4	30°1	29°7	29°5	35°35
35°0	35°2	34°5	35°2	35°6	36°4	37°2	39°2	39°5	38°7	37°4	37°2	36°5	36°2	35°2	34°92
37°2	35°8	35°1	34°6	34°1	32°4	32°1	31°4	31°2	30°7	29°6	28°2	27°8	26°9	25°3	33°79
30°0	38°6	35°1	34°9	34°5	34°2	33°9	34°2	31°2	30°3	29°2	27°6	26°5	26°5	25°3	32°17
37°1	37°8	37°6	37°1	32°7	29°0	23°2	20°2	18°2	—	—	—	—	—	—	29°20
—	—	—	—	—	—	—	—	—	21°3	21°1	20°8	20°6	20°5	19°9	—
15°0	15°2	13°7	11°4	9°9	8°4	7°4	7°4	6°9	4°9	4°7	4°7	3°9	3°6	3°5	10°08
21°8	21°8	21°7	25°0	25°7	26°5	25°0	25°8	26°9	26°4	25°5	22°7	22°3	21°6	21°5	20°26
18°8	18°2	17°5	17°3	16°4	14°8	14°1	13°4	12°6	11°3	11°2	11°1	3°5	—	1°4	14°73
22°2	20°9	20°5	18°8	18°5	17°8	17°7	18°0	19°6	19°7	21°5	22°5	23°1	23°8	24°4	15°89
35°2	35°0	35°2	30°3	31°0	32°0	30°6	29°8	25°0	19°8	16°0	14°3	13°0	13°5	15°3	26°97
33°7	32°4	32°0	31°8	31°0	29°7	29°5	29°7	28°0	—	—	—	—	—	—	26°70
—	—	—	—	—	—	—	—	—	18°0	19°6	20°4	21°1	21°4	21°3	—
26°1	25°7	25°1	22°8	22°9	22°9	21°9	21°5	20°4	18°8	18°4	20°0	20°2	20°6	20°2	22°67
31°0	29°7	27°1	25°4	24°3	23°7	22°9	22°5	21°3	21°1	19°4	18°2	10°1	6°1	4°1	22°21
27°6	26°7	25°5	17°9	13°2	10°7	10°7	10°1	9°9	8°4	6°4	7°3	6°0	5°7	5°5	15°50
26°9	28°2	27°4	28°1	28°7	25°0	25°5	25°5	25°5	25°7	25°1	24°2	24°0	24°0	24°3	24°12
30°3	29°7	28°6	27°1	25°9	23°6	25°5	26°3	26°3	24°6	25°7	25°7	26°2	26°7	26°6	26°35
29°9	28°6	26°1	25°0	25°0	23°4	23°2	20°9	20°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	17°1	17°3	16°4	15°7	14°1	13°1	24°01
25°1	23°6	20°0	19°8	18°8	17°2	16°2	17°0	15°4	15°4	14°5	14°5	12°4	11°6	11°6	18°44
20°1	18°8	16°1	14°2	10°7	8°9	7°2	5°3	3°1	4°3	6°4	3°9	2°3	0°8	0°4	11°46
16°5	15°5	14°0	13°0	10°9	8°2	5°5	5°9	5°1	0°2	0°0	—	1°0	0°0	—	9°8
7°4	6°0	4°9	2°7	—	0°1	—	0°2	—	8°9	—	—	—	—	—	—
11°8	11°1	11°1	11°8	11°1	11°0	10°7	10°5	10°7	11°0	11°0	11°1	11°0	11°8	11°6	8°98
19°4	19°2	18°5	17°8	17°3	16°6	16°4	16°0	15°1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	16°4	15°6	14°8	14°5	13°9	13°7	16°04
26°90	26°26	25°08	23°75	22°75	21°63	20°61	19°46	19°33	18°02	19°23	16°13	16°08	15°62	14°18	20°86

STANDARD THERMOMETER.												
Hours of Mean Lutinger Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	2	13°2	14°3	17°5	20°8	23°4	24°4	24°2	25°6	26°1	26°6	26°7
	3	9°5	10°3	14°8	23°4	28°0	29°3	30°0	29°9	30°2	30°3	29°0
	4	14°0	26°1	26°3	32°3	34°1	35°7	37°2	38°2	38°1	37°4	37°3
	5	32°0	31°0	33°5	35°3	38°2	39°1	37°8	38°0	39°8	43°6	39°8
	6	28°0	28°2	29°6	31°4	29°7	29°7	31°0	29°7	30°3	29°7	28°3
	7	10°3	13°7	17°5	24°0	27°4	28°6	29°5	28°8	29°0	30°6	30°7
	8	—	—	—	—	—	—	—	—	—	—	—
	9	33°7	33°7	34°7	35°9	37°7	37°2	37°3	37°1	36°2	36°0	36°2
	10	28°7	30°3	35°3	38°3	39°3	39°0	39°5	39°4	39°8	40°2	40°1
	11	25°9	24°9	32°3	37°8	39°7	39°2	39°2	39°7	39°5	39°9	40°4
	12	33°6	36°3	37°8	40°2	42°4	43°1	42°6	43°8	41°1	39°8	39°7
	13	39°0	39°2	38°4	39°8	40°4	41°3	42°0	42°4	43°3	43°5	45°0
	14	35°4	36°2	38°0	38°9	39°5	39°3	39°3	39°5	38°2	37°9	37°4
	15	—	—	—	—	—	—	—	—	—	—	—
	16	29°9	29°6	29°7	28°8	29°2	29°6	29°1	29°9	31°2	31°6	32°8
	17	25°9	26°1	26°9	27°8	28°8	29°0	30°8	33°1	34°7	36°0	35°4
	18	22°5	24°9	26°7	31°4	36°0	38°2	38°2	39°2	39°5	39°7	39°4
	19	35°0	36°8	38°2	42°8	44°7	46°2	47°5	49°2	46°4	45°0	40°8
	20	27°4	30°1	36°8	43°3	40°9	42°8	44°5	45°4	47°6	46°4	44°9
	21	33°1	33°1	33°2	33°1	33°5	34°2	34°9	36°3	37°2	38°0	38°6
	22	—	—	—	—	—	—	—	—	—	—	—
	23	34°1	35°6	37°7	39°6	40°8	42°1	42°6	43°3	42°2	40°8	41°0
	24	38°6	39°2	39°5	40°4	40°4	39°5	39°5	39°5	40°0	41°2	39°5
	25	38°8	39°2	39°4	39°4	40°3	40°8	41°0	42°2	40°7	40°8	39°9
	26	35°2	35°8	37°0	41°6	42°4	44°5	44°1	45°1	46°7	43°8	40°0
	27	35°7	37°0	38°1	38°6	42°5	42°4	43°0	42°5	44°4	41°5	40°4
	28	34°5	34°7	36°4	37°4	39°4	41°3	40°0	39°5	39°8	38°2	37°6
	29	—	—	—	—	—	—	—	—	—	—	—
	30	31°6	33°7	34°4	35°6	37°4	38°0	39°4	40°2	39°5	39°4	37°8
	31	28°4	32°9	35°6	37°4	39°1	42°1	40°6	40°4	41°3	41°9	40°4
Hourly Means	29°00	30°27	32°51	35°20	36°74	37°57	37°88	38°38	38°55	38°45	37°76	37°69
APRIL.	1	29°2	31°8	35°2	38°9	40°3	41°5	41°7	41°5	42°2	41°9	43°0
	2	29°6	33°5	38°2	39°0	39°2	40°7	41°7	41°2	41°7	42°3	40°6
	3	31°2	35°6	40°3	40°7	41°9	43°0	44°2	44°7	45°4	45°9	44°0
	4	34°9	38°6	40°2	42°6	43°8	44°9	45°8	45°8	47°8	48°8	49°6
	5	—	—	—	—	—	—	—	—	—	—	—
	6	42°1	41°5	42°1	43°6	48°2	50°7	51°0	52°5	51°1	50°5	51°0
	7	44°0	45°9	49°0	51°7	55°1	55°1	54°4	54°2	53°2	54°7	55°7
	8	33°9	34°9	36°4	36°9	37°9	39°8	39°4	41°3	41°9	42°4	42°4
	9	24°5	33°5	37°6	41°8	42°7	44°3	46°2	48°0	48°6	47°8	43°2
	10	—	—	—	—	—	—	—	—	—	—	—
	11	38°8	38°7	41°3	49°6	52°2	55°0	55°8	53°4	49°0	45°6	43°9
	12	—	—	—	—	—	—	—	—	—	—	—
	13	26°8	27°5	28°0	29°2	32°7	33°9	35°6	36°7	38°8	38°8	39°0
	14	28°2	34°3	38°6	41°5	43°5	44°4	43°2	43°2	42°6	44°7	44°2
	15	30°8	30°1	30°3	31°8	34°1	35°8	38°0	39°0	40°6	40°4	41°9
	16	27°4	33°5	38°2	40°6	43°4	43°4	43°7	45°8	46°6	45°7	41°3
	17	33°5	41°9	45°4	51°2	51°8	54°1	54°5	55°6	54°9	55°9	56°2
	18	54°2	52°8	51°4	53°3	49°3	51°4	50°0	55°3	53°8	56°7	56°6
	19	—	—	—	—	—	—	—	—	—	—	—
	20	31°2	39°4	44°9	46°8	50°4	54°0	56°6	59°0	62°2	61°5	60°9
	21	44°5	53°2	58°5	62°3	64°6	67°9	70°8	70°8	79°1	74°6	71°4
	22	43°0	44°4	44°7	45°2	45°8	46°4	48°0	50°5	50°6	50°2	51°6
	23	49°2	50°9	50°8	47°4	50°3	51°8	53°8	54°5	55°3	55°0	54°8
	24	50°8	51°3	51°3	51°9	53°2	53°8	54°6	56°1	54°5	55°2	55°8
	25	43°8	44°2	43°4	41°3	41°3	42°6	42°3	44°4	46°2	45°0	44°6
	26	—	—	—	—	—	—	—	—	—	—	—
	27	42°9	49°6	52°8	56°6	57°2	57°0	56°4	55°9	54°7	56°2	57°8
	28	46°6	53°6	53°4	54°0	53°6	55°6	55°3	55°7	57°2	59°2	59°9
	29	46°2	46°0	45°8	48°1	49°6	49°2	50°5	49°0	48°0	48°2	47°6
	30	48°5	49°4	51°2	48°8	49°0	52°1	54°2	56°1	57°7	54°8	55°3
Hourly Means	38°23	41°44	43°56	45°39	46°84	48°34	49°11	50°01	50°54	50°46	50°17	48°90

* Good Friday.

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
26.6	26.7	25.7	22.2	16.1	15.6	12.9	12.5	9.2	8.6	7.6	8.4	10.1	8.2	10.3	17.08
30.3	30.3	29.0	28.0	23.0	18.6	16.9	17.1	16.6	21.5	21.1	22.1	19.8	16.9	15.5	22.17
37.4	37.3	38.2	39.0	38.4	37.5	36.9	36.8	35.4	31.8	31.2	33.1	33.7	34.9	34.1	33.94
43.6	39.8	43.6	41.0	39.5	36.6	32.2	32.2	29.6	26.8	27.6	27.9	29.2	28.7	28.4	34.64
29.7	29.7	28.3	24.6	20.8	17.1	15.0	13.2	13.1	10.5	10.2	9.2	8.4	9.2	8.6	21.47
30.6	30.7	30.3	30.1	30.1	30.3	30.6	30.1	29.5	—	—	—	—	—	—	—
36.0	36.2	35.6	34.5	31.4	29.2	31.6	32.7	32.9	33.7	31.1	33.7	32.2	29.7	—	31.22
40.2	40.1	39.2	36.1	30.6	24.2	28.0	27.1	26.9	25.5	26.1	26.9	26.9	25.7	25.3	32.60
39.9	40.4	40.0	38.0	35.6	31.7	33.4	33.5	33.3	32.2	31.6	31.0	31.0	31.6	31.8	34.84
39.8	39.7	39.8	39.8	39.6	38.2	39.2	40.0	40.1	39.9	39.8	40.2	40.3	38.6	38.4	39.76
43.5	45.0	43.1	41.0	39.7	37.5	37.2	36.9	36.9	37.0	36.1	35.6	35.6	35.2	36.2	39.25
37.9	37.4	34.0	33.5	31.6	31.2	31.2	30.8	30.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	31.9	32.4	31.6	30.8	30.4	30.6	31.60
31.6	32.8	33.3	31.4	29.0	27.8	25.7	24.8	24.4	25.9	25.6	24.9	24.2	23.8	24.9	28.21
36.0	35.4	33.9	32.2	28.4	27.4	25.6	24.6	23.3	21.7	21.5	21.6	21.9	21.8	20.4	27.45
39.7	39.4	37.5	35.0	33.6	32.4	33.5	33.9	33.3	32.9	31.6	31.6	31.1	34.6	35.2	34.20
45.0	40.8	40.7	39.0	37.6	35.4	34.3	31.0	30.1	29.2	30.1	30.1	28.4	28.4	29.0	37.33
46.4	41.9	42.1	40.4	40.0	42.3	37.8	38.2	38.2	36.6	35.8	35.8	35.4	34.1	33.2	39.17
38.0	38.6	38.6	37.2	34.5	31.1	27.6	26.8	27.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	34.3	31.3	35.2	34.7	33.9	33.7	33.97
40.8	41.0	40.6	40.4	39.1	38.4	38.3	38.1	39.0	39.3	39.5	39.5	39.0	38.5	38.6	39.52
41.2	39.5	40.0	40.0	40.7	41.6	41.3	41.7	40.4	39.8	38.7	38.4	38.3	38.4	38.4	39.79
40.8	39.9	39.4	39.3	39.3	39.6	39.3	38.6	38.1	37.8	36.8	36.4	35.8	35.4	35.0	38.90
43.8	40.0	38.4	38.2	37.0	37.0	36.4	36.2	36.6	36.4	36.2	35.8	36.0	35.1	36.0	38.82
41.5	40.4	38.0	38.4	37.6	38.2	37.8	37.0	37.2	36.8	35.9	35.5	34.5	34.5	34.8	38.43
38.2	37.6	36.6	35.4	34.7	34.7	35.0	34.5	34.1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	29.2	30.2	30.6	30.2	30.3	30.3	35.19
39.4	37.8	38.2	37.2	35.6	33.9	31.2	29.6	29.0	31.2	32.3	31.8	31.8	30.8	29.7	34.55
41.9	40.4	40.3	41.2	36.0	33.3	33.5	31.9	30.8	29.8	27.1	26.9	29.0	29.0	29.2	35.02
38.45	37.76	37.09	35.89	33.83	32.70	31.63	31.15	30.65	30.62	30.59	30.46	30.21	29.69	29.65	33.61
41.9	43.0	41.0	39.0	33.3	31.0	33.1	28.8	29.5	29.5	28.8	26.9	26.3	25.5	27.6	34.35
42.3	40.6	40.1	37.8	33.3	30.3	29.5	29.5	29.7	30.1	30.6	29.9	30.1	29.7	28.8	34.89
45.4	45.9	44.0	41.5	35.6	34.1	32.2	31.1	35.2	35.7	34.5	32.9	30.3	32.0	32.2	38.03
48.8	49.6	49.3	45.8	45.0	45.2	45.0	41.9	40.3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	46.9	46.5	46.7	46.7	45.5	43.2	44.53
50.5	51.0	49.2	49.1	48.2	48.0	46.3	46.8	45.9	45.4	45.0	44.7	43.6	43.2	42.6	46.76
51.7	55.7	52.7	51.5	50.6	50.2	47.6	48.0	45.4	44.2	42.2	39.5	36.8	36.6	35.1	48.06
42.4	42.4	42.2	40.2	37.1	36.0	32.9	32.0	32.0	28.6	27.5	26.6	25.7	26.1	24.1	34.95
47.8	43.2	39.8	38.4	36.8	36.8	36.6	35.1	35.0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	42.4	41.7	41.3	41.0	40.0	39.3	40.11
45.6	43.9	41.2	39.1	38.0	37.5	36.4	35.8	34.9	—	—	—	—	—	—	—
38.8	39.0	37.4	35.6	33.5	29.7	27.6	27.4	28.1	28.6	28.3	27.4	26.5	26.5	26.8	39.44
44.7	44.2	41.0	39.8	37.6	36.4	36.4	35.6	35.8	34.6	34.1	32.1	31.4	30.9	31.6	31.48
40.4	41.9	41.9	39.5	34.8	31.0	28.9	27.6	27.6	27.1	—	26.6	26.0	26.0	24.8	37.77
45.7	41.3	39.9	39.7	39.8	39.7	40.3	39.5	39.5	39.5	—	—	38.8	36.0	33.5	32.81
55.9	56.2	56.6	56.1	51.9	49.3	44.9	43.0	42.2	40.8	39.4	42.1	41.0	46.1	53.2	39.80
56.7	56.6	57.8	56.4	53.4	50.0	49.7	45.0	42.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	32.5	32.8	31.6	31.0	30.1	29.2	48.40
61.5	60.9	58.8	56.2	55.8	51.9	54.5	51.5	46.6	47.2	50.2	45.5	44.9	45.6	46.0	46.94
74.6	71.4	62.9	57.0	55.5	52.7	51.6	50.9	51.0	50.3	50.0	50.0	44.8	42.9	42.6	51.03
50.2	51.6	48.4	46.5	44.6	43.6	44.0	43.4	44.4	46.0	46.2	46.3	46.0	47.2	47.8	57.50
55.0	54.8	55.3	54.8	54.1	53.1	53.2	54.5	55.3	55.8	55.3	54.0	50.6	50.4	50.8	46.45
55.2	55.8	56.0	54.5	48.4	46.0	46.2	47.6	49.2	49.4	50.1	50.1	49.4	49.4	44.7	52.96
45.0	44.6	44.7	44.7	44.0	43.0	42.8	44.7	44.6	—	—	—	—	—	—	51.23
—	—	—	—	—	—	—	—	—	39.8	41.3	40.7	40.4	39.5	39.3	42.86
56.2	57.8	58.0	56.1	50.1	45.4	43.8	43.8	43.1	43.2	42.8	39.7	39.2	37.2	37.2	49.03
59.2	59.9	61.0	59.4	57.8	50.7	49.1	47.8	44.7	44.8	45.6	47.8	48.6	48.4	47.4	52.39
48.2	47.6	48.7	48.8	48.7	48.2	47.6	47.2	46.8	46.8	46.8	46.6	47.2	47.2	47.8	47.78
54.8	55.3	54.2	54.4	52.6	51.2	50.2	50.8	50.6	50.4	50.3	51.0	50.9	52.3	52.1	52.02
50.46	50.17	48.90	47.28	44.83	42.96	41.82	41.30	40.80	40.26	40.69	39.45	38.61	38.51	38.26	44.09

STANDARD THERMOMETER.												
Hours of Mean Guthrie's Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto's Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	53°5	54°2	55°0	55°0	56°0	56°6	55°7	55°7	56°8	55°3	53°8
	2	52°7	54°1	55°1	55°3	56°9	56°1	55°2	58°6	59°0	58°0	58°0
	3	—	—	—	—	—	—	—	—	—	—	—
	4	42°4	53°0	57°6	59°8	62°7	63°8	65°7	64°7	65°0	64°9	66°5
	5	45°8	51°4	58°0	59°1	55°5	54°5	58°8	62°1	62°9	64°7	63°3
	6	54°8	55°9	56°3	56°6	53°9	52°9	52°3	52°3	53°6	55°7	55°8
	7	49°0	53°2	54°5	55°1	54°7	56°4	57°1	57°8	55°3	56°4	56°2
	8	51°3	55°2	56°9	59°5	60°7	61°7	61°3	62°1	61°7	59°7	58°8
	9	54°5	55°1	56°0	55°1	55°1	54°5	55°1	55°8	55°7	55°8	56°3
	10	—	—	—	—	—	—	—	—	—	—	—
	11	35°8	37°0	37°0	36°9	38°0	40°0	42°2	42°6	44°6	46°2	47°2
	12	44°2	47°1	50°0	53°0	55°3	57°4	58°8	58°8	60°5	61°3	60°6
	13	43°2	46°2	47°0	54°3	57°7	60°5	63°0	64°2	67°5	67°7	68°3
	14	54°2	58°0	60°0	64°2	65°5	64°7	65°1	65°3	67°1	64°2	69°3
	15	50°6	50°8	50°0	51°7	54°0	54°4	57°9	59°9	57°4	59°4	59°7
	16	47°6	49°2	54°2	58°8	59°8	61°4	60°4	61°5	61°3	60°5	61°9
	17	—	—	—	—	—	—	—	—	—	—	—
	18	54°1	53°9	53°1	54°7	55°3	55°8	55°5	54°2	53°1	53°3	53°0
	19	39°0	42°5	44°9	47°2	48°7	50°8	50°4	51°6	54°0	55°1	55°2
	20	44°1	48°7	53°2	57°2	61°3	64°0	64°6	65°1	66°5	66°1	65°7
	21	42°8	44°7	45°4	45°8	46°6	46°8	47°4	48°2	49°3	51°5	50°3
	22	42°4	47°4	49°0	53°8	54°9	57°6	56°6	56°6	57°8	55°9	53°5
	23	50°1	51°3	56°4	57°4	61°3	61°5	65°1	69°6	69°8	68°1	66°4
	24	—	—	—	—	—	—	—	—	—	—	—
	25	60°7	61°9	67°2	69°2	69°4	69°0	71°1	71°4	73°0	70°0	68°4
	26	64°1	65°7	70°1	71°6	71°2	71°3	73°3	76°2	74°2	73°6	72°2
	27	65°7	71°8	73°4	74°6	74°2	75°1	75°6	75°8	76°7	76°0	77°6
	28	59°3	63°4	65°1	65°7	69°2	68°0	69°3	71°9	70°6	68°5	67°1
	29	57°4	62°3	66°7	69°3	70°8	69°2	70°0	70°1	70°8	69°5	68°6
	30	59°6	58°2	60°9	63°1	69°6	71°2	71°8	72°8	71°4	72°3	72°1
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	50°84	53°78	55°96	58°00	59°32	60°05	60°90	61°73	62°14	61°92	61°97	61°35
JUNE.	1	59°8	61°7	66°2	64°6	61°9	65°3	69°1	69°9	69°4	69°3	72°0
	2	63°5	63°3	64°7	68°1	65°9	65°9	62°5	65°0	65°7	66°1	66°2
	3	56°2	59°9	62°9	66°2	63°1	65°7	61°6	61°1	67°7	69°1	68°0
	4	60°4	64°2	63°5	64°0	65°2	64°0	67°7	69°6	66°1	60°7	61°9
	5	56°1	55°7	54°4	54°2	54°3	54°2	55°1	57°2	57°8	61°1	58°0
	6	45°0	49°1	51°2	54°5	55°3	56°4	57°9	56°6	57°8	56°6	58°0
	7	—	—	—	—	—	—	—	—	—	—	—
	8	48°0	55°3	59°5	61°9	63°3	65°7	65°1	65°6	65°3	66°2	67°5
	9	51°1	55°8	62°1	66°0	68°2	68°3	66°9	67°4	68°7	69°1	69°6
	10	53°4	58°2	64°7	66°2	66°5	69°4	71°6	72°2	71°1	74°7	71°9
	11	58°2	63°1	65°0	68°7	69°9	67°5	64°6	62°5	63°3	66°3	65°7
	12	52°6	54°5	56°5	59°2	61°5	59°5	59°2	59°7	60°3	61°1	62°3
	13	58°4	62°5	62°3	65°5	65°3	64°7	64°6	64°6	65°5	63°9	62°7
	14	—	—	—	—	—	—	—	—	—	—	—
	15	60°4	63°4	67°3	71°8	74°2	73°7	74°4	74°5	74°4	74°6	74°6
	16	60°7	62°9	65°7	68°1	69°0	67°5	68°7	69°1	69°1	69°4	69°8
	17	56°0	62°0	66°7	70°2	71°2	72°6	73°8	74°8	75°0	76°4	75°2
	18	61°7	62°9	64°2	69°8	73°6	74°8	75°6	77°8	72°3	70°4	76°2
	19	67°5	68°7	68°4	69°1	71°2	75°0	76°9	78°9	79°5	80°3	80°5
	20	59°2	59°5	59°7	60°1	60°7	60°3	60°0	60°5	60°7	59°4	59°7
	21	—	—	—	—	—	—	—	—	—	—	—
	22	54°3	55°8	58°0	60°3	64°1	66°5	65°7	68°1	68°1	67°9	66°7
	23	58°4	61°9	63°6	67°3	71°0	72°8	73°7	74°2	74°4	75°0	75°2
	24	60°7	64°6	66°4	69°3	72°6	75°0	77°8	78°2	78°9	77°3	79°3
	25	66°1	68°4	71°8	75°7	78°5	80°9	81°9	83°3	81°2	79°9	79°7
	26	64°2	64°9	67°7	68°9	73°6	76°0	75°5	75°4	78°7	80°3	75°6
	27	63°0	68°0	66°9	67°7	69°1	71°6	73°2	71°4	69°3	68°6	69°3
	28	—	—	—	—	—	—	—	—	—	—	—
	29	65°1	64°9	65°9	68°4	72°0	73°6	74°2	76°2	75°0	75°2	77°1
	30	69°0	72°1	74°2	75°6	76°2	77°8	77°8	77°8	78°3	78°5	79°1
Hourly Means	58°81	61°78	63°83	66°21	67°59	68°64	69°17	69°79	69°87	69°90	70°17	70°17

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
53.3	53.8	53.2	53.4	53.0	52.6	53.9	54.5	52.5	51.8	51.6	51.4	51.9	52.4	52.4	53.84
53.0	53.0	53.0	53.4	53.2	50.6	48.3	47.3	49.0	—	—	—	—	—	—	52.39
49.9	66.9	66.5	64.0	58.8	51.4	51.0	49.8	47.0	44.5	43.0	41.5	40.8	41.1	40.6	54.78
47.7	63.3	59.5	59.0	57.0	54.6	51.4	51.7	52.0	52.0	51.2	51.0	51.0	50.6	53.6	55.45
57.7	55.8	56.0	54.4	50.8	48.6	47.8	46.0	44.4	44.4	44.9	44.3	42.4	41.4	41.0	50.77
57.4	56.2	56.2	55.8	54.4	53.0	50.2	49.0	47.8	48.7	49.3	48.2	49.2	48.0	49.6	52.71
57.7	58.8	57.8	58.2	57.1	55.8	55.8	56.0	55.7	55.8	56.0	55.1	54.9	53.8	54.2	57.30
57.8	56.3	57.0	57.6	57.8	58.4	58.8	58.4	58.4	—	—	—	—	—	—	51.86
53.2	47.2	47.4	47.6	45.9	41.4	41.3	40.4	41.2	41.0	41.3	41.3	41.7	41.9	42.9	41.78
47.3	60.6	63.1	57.0	53.6	46.4	44.6	43.6	41.7	41.3	37.9	37.8	38.7	41.2	42.2	49.84
47.7	68.3	69.4	69.3	61.7	58.8	56.7	62.2	62.9	59.9	60.7	58.2	56.8	54.9	54.3	59.56
47.2	69.3	69.9	61.9	62.1	61.1	61.1	61.3	59.9	64.6	63.6	63.0	57.0	56.7	52.0	62.03
47.4	62.4	59.7	57.0	54.3	52.4	50.2	49.3	48.9	46.3	46.0	46.0	45.4	44.9	45.2	52.25
47.5	61.9	60.1	59.4	57.6	53.3	50.4	49.0	49.0	—	—	—	—	—	—	56.13
47.3	53.0	51.6	53.2	46.8	44.2	42.9	41.3	40.8	40.4	37.5	36.2	36.1	35.2	35.6	47.28
57.1	55.2	55.8	52.2	51.0	47.5	40.2	38.7	38.5	39.7	39.8	42.1	42.1	42.1	40.4	46.19
57.1	65.7	64.9	63.2	58.1	54.4	50.0	51.2	47.2	46.6	45.8	42.6	41.8	36.3	37.8	54.02
47.5	50.3	49.6	49.6	44.9	42.1	39.2	38.6	37.6	37.0	36.4	35.6	34.5	34.3	34.9	43.05
57.0	55.9	53.5	53.2	52.6	52.3	51.8	51.4	52.4	49.6	48.0	47.2	47.4	47.6	47.7	51.78
58.1	66.4	66.1	63.8	61.9	59.5	58.2	58.0	58.0	—	—	—	—	—	—	59.14
60.0	68.4	69.3	71.4	69.6	66.3	63.9	63.1	62.0	60.7	60.4	60.5	61.5	59.1	61.2	65.97
47.6	72.2	72.0	69.3	67.0	62.7	62.1	61.1	61.1	59.9	60.5	60.4	61.1	60.5	60.9	66.80
60.0	77.6	78.1	74.6	74.4	67.7	62.1	62.0	57.5	56.7	56.2	54.9	55.5	55.1	55.8	67.80
87.5	67.1	68.6	71.0	70.8	66.7	61.3	58.8	58.8	58.4	56.1	53.2	50.4	52.3	51.8	63.18
97.5	68.6	64.2	61.4	63.4	61.1	61.1	61.1	61.5	62.0	61.2	59.4	59.9	59.8	59.8	64.32
2.3	72.1	72.1	72.2	67.7	64.6	63.5	64.7	63.5	—	—	—	—	—	—	64.67
1.92	61.97	61.33	60.31	57.98	55.02	52.99	52.63	51.90	50.56	49.80	48.93	48.55	48.17	48.45	55.55
97.3	72.0	73.0	63.4	65.6	61.1	61.6	63.3	62.5	62.2	61.2	60.5	60.5	59.7	60.9	64.95
97.1	66.2	65.7	62.9	59.0	63.1	60.3	57.8	53.2	52.0	51.2	51.8	50.2	49.2	49.6	60.04
97.1	68.0	71.0	69.5	64.5	62.0	62.1	60.5	60.1	59.4	59.4	59.4	58.2	58.2	58.8	62.94
97.7	61.9	61.5	61.5	61.9	58.8	58.8	59.1	59.1	58.8	59.2	57.4	56.6	56.5	56.4	61.38
1.1	58.0	58.6	58.4	56.6	54.4	48.5	50.1	49.1	49.0	48.0	45.4	41.2	43.4	42.8	52.79
6.6	58.0	58.9	58.1	55.1	48.2	45.6	43.0	41.5	—	—	—	—	—	—	51.50
6.2	67.5	66.9	64.4	60.3	53.2	50.1	49.3	48.5	48.0	46.2	44.7	41.0	43.8	45.0	56.17
9.1	69.6	69.0	68.0	62.0	55.8	52.2	50.0	50.4	49.0	47.4	47.4	46.0	46.2	46.4	58.46
4.7	71.9	71.8	69.1	66.9	62.5	59.7	59.9	58.0	56.8	54.5	55.4	55.8	54.5	55.4	63.60
6.3	65.7	67.9	66.3	62.7	57.4	55.3	52.6	51.7	55.3	54.0	53.0	51.4	50.2	49.3	60.20
1.1	62.3	62.7	61.2	58.0	54.9	52.2	52.4	51.8	54.2	57.9	58.0	56.1	54.6	54.1	57.27
3.9	62.7	62.0	61.4	60.3	59.4	56.3	54.6	53.8	—	—	—	—	—	—	60.45
4.6	74.6	77.5	76.3	73.0	69.9	67.5	65.7	65.1	64.2	63.5	63.3	62.5	60.5	57.6	68.75
9.4	69.3	69.8	68.1	64.0	61.3	59.5	56.6	57.4	57.4	56.0	53.9	51.0	50.0	50.6	62.30
6.4	73.2	73.2	72.4	68.9	66.5	62.0	60.3	59.6	60.5	60.1	58.7	59.7	60.1	59.9	66.49
0.4	76.2	75.9	76.7	75.0	68.9	68.2	67.4	65.7	64.7	63.5	62.3	62.7	63.2	63.3	69.01
0.3	80.5	80.5	76.7	69.4	68.5	65.5	66.0	65.2	62.3	60.1	59.3	59.2	59.9	59.0	69.48
9.4	59.7	59.0	58.3	57.1	57.2	54.7	51.4	53.0	—	—	—	—	—	—	56.42
7.9	66.7	65.3	62.7	61.3	59.0	59.2	57.4	55.3	52.7	53.6	54.5	54.4	54.7	55.3	60.04
5.0	75.2	74.6	74.2	71.2	67.3	65.3	63.8	61.8	61.3	60.5	60.2	57.8	57.6	58.6	66.74
7.3	79.3	78.7	77.1	73.3	68.1	66.7	64.7	65.6	64.9	64.7	63.8	63.8	63.3	63.8	69.94
9.9	79.7	78.5	74.6	74.2	71.0	69.3	67.1	66.6	66.1	64.7	64.2	64.6	64.6	63.1	72.33
0.3	75.6	76.5	72.6	71.6	70.4	69.4	67.9	68.1	65.9	65.7	65.1	63.8	61.9	59.3	69.96
8.6	69.3	69.6	69.3	66.5	65.3	64.7	63.8	63.3	—	—	—	—	—	—	66.88
5.2	77.1	76.4	75.6	72.2	69.4	67.0	65.5	65.7	65.9	67.9	66.1	64.0	63.1	63.9	69.60
8.5	79.1	79.9	79.3	76.2	72.2	71.3	70.3	69.6	66.9	65.1	64.4	63.0	63.4	65.7	72.65
9.90	70.17	70.17	68.59	65.65	62.65	60.62	59.30	58.65	58.45	57.94	57.25	56.44	55.92	56.03	63.48

STANDARD THERMOMETER.												
Hours of Mean Gittingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.	1	69.4	72.8	75.2	75.8	76.4	77.3	78.3	75.6	76.9	75.4	74.8
	2	67.3	67.3	68.1	68.2	70.2	72.8	75.5	76.2	74.9	75.3	75.4
	3	61.5	66.9	69.8	71.6	72.4	73.0	74.2	73.8	74.6	74.6	73.3
	4	58.0	66.6	71.3	72.0	74.5	77.3	77.8	75.4	78.9	75.4	78.2
	5	—	—	—	—	—	—	—	—	—	—	—
	6	63.8	67.4	69.9	73.2	75.8	77.5	78.2	79.9	81.1	80.3	80.9
	7	60.5	64.0	66.1	66.9	70.2	72.8	73.8	74.0	73.4	76.5	77.8
	8	62.2	64.3	63.0	64.4	67.9	69.9	72.2	75.0	78.0	79.1	80.1
	9	62.9	69.9	76.3	78.5	77.5	73.4	69.6	67.1	73.0	74.4	78.3
	10	76.9	80.4	85.2	86.1	89.9	91.9	94.0	77.3	87.0	90.5	90.9
	11	69.6	75.6	77.3	79.3	85.3	84.3	86.3	86.1	80.7	75.6	76.7
	12	—	—	—	—	—	—	—	—	—	—	—
	13	57.6	59.7	63.1	67.9	69.6	71.6	74.1	75.8	75.0	76.9	77.2
	14	52.2	55.8	58.6	60.5	61.5	62.9	64.9	64.0	64.9	63.9	62.9
	15	50.0	54.2	56.1	58.4	58.2	59.7	61.9	61.9	62.6	61.1	61.6
	16	54.0	59.7	61.7	63.6	64.9	62.7	65.3	66.5	69.1	68.3	69.3
	17	49.6	58.8	66.1	67.3	69.5	70.6	71.0	71.0	73.0	70.0	69.3
	18	56.2	63.5	66.7	69.1	70.6	71.6	72.8	73.8	74.4	74.1	75.0
	19	—	—	—	—	—	—	—	—	—	—	—
	20	66.7	69.6	69.1	72.6	75.4	75.7	76.8	77.1	77.5	78.6	78.5
	21	65.5	69.2	72.0	75.0	75.9	76.2	77.9	76.7	75.9	74.5	74.6
	22	64.4	66.1	66.7	70.0	69.3	70.6	71.7	75.8	73.9	75.8	73.4
	23	60.9	66.1	70.1	73.9	78.3	76.0	78.1	79.1	80.1	78.7	81.9
	24	66.9	66.9	65.1	65.6	65.7	66.3	65.8	65.6	68.1	71.4	68.9
	25	64.1	68.1	71.2	74.4	76.3	78.2	78.5	79.1	80.6	79.1	79.4
	26	—	—	—	—	—	—	—	—	—	—	—
	27	63.5	68.5	71.2	72.3	73.1	72.6	73.2	73.1	71.0	75.5	75.0
	28	62.6	66.1	70.0	72.9	75.3	75.5	74.1	74.0	75.4	75.0	75.4
	29	69.3	74.0	74.8	77.5	78.9	79.7	82.7	80.9	78.2	81.5	82.7
	30	72.4	75.2	78.0	78.9	80.5	79.9	79.5	82.9	84.5	84.9	81.5
	31	65.0	65.5	66.9	69.8	72.6	72.8	75.1	76.2	76.9	77.1	78.6
Hourly Means		62.63	66.75	69.24	71.32	73.17	73.81	75.05	74.59	75.65	75.73	76.07
AUGUST.	1	62.4	66.9	70.2	73.2	74.5	75.2	76.2	76.0	76.7	77.1	76.4
	2	—	—	—	—	—	—	—	—	—	—	—
	3	59.7	65.5	70.4	73.4	75.2	76.9	78.7	80.3	81.5	81.5	81.1
	4	65.9	70.1	73.9	77.3	78.9	81.9	83.7	84.3	84.7	85.1	85.1
	5	69.4	73.6	76.7	79.7	81.9	83.7	84.1	85.9	86.1	85.9	85.3
	6	63.5	67.9	72.8	78.2	81.7	82.7	82.7	82.7	81.5	81.5	80.2
	7	65.4	68.9	72.1	75.4	76.9	79.9	81.0	82.3	82.2	81.3	80.3
	8	86.5	67.9	70.0	66.4	66.1	68.3	72.7	73.9	73.8	73.8	73.2
	9	—	—	—	—	—	—	—	—	—	—	—
	10	67.2	67.4	68.6	70.6	73.8	74.6	74.6	76.2	77.3	78.3	77.5
	11	55.7	60.5	64.6	68.1	70.2	71.8	72.3	72.8	73.3	73.0	73.6
	12	55.7	62.5	68.7	72.8	76.4	77.0	78.4	80.1	80.9	81.3	79.7
	13	69.1	71.4	73.8	75.4	79.5	79.9	83.9	84.5	73.3	76.7	78.5
	14	64.7	66.3	71.8	75.2	77.1	77.3	77.3	76.4	77.3	78.0	79.3
	15	60.0	66.4	70.2	74.4	78.0	78.0	79.9	79.7	80.5	82.3	82.1
	16	—	—	—	—	—	—	—	—	—	—	—
	17	61.3	63.8	66.5	68.1	71.2	71.0	71.4	70.6	72.1	72.4	72.4
	18	50.4	53.3	55.7	59.1	62.3	63.3	63.3	64.1	64.4	65.3	65.3
	19	54.6	61.7	62.5	64.0	64.4	66.7	66.3	66.6	68.7	66.1	65.6
	20	61.5	61.9	62.1	62.8	63.8	64.5	65.5	67.3	67.5	67.7	68.3
	21	57.1	62.6	67.7	70.8	71.4	72.0	72.4	71.6	72.4	74.0	73.1
	22	64.4	65.1	65.3	65.3	66.3	69.1	71.0	70.7	73.5	71.5	70.3
	23	—	—	—	—	—	—	—	—	—	—	—
	24	57.0	60.3	62.9	66.4	67.9	67.5	67.5	67.7	68.1	69.3	69.2
	25	55.9	61.1	66.1	68.7	69.5	70.8	70.8	70.3	72.6	73.3	72.5
	26	56.4	64.9	69.6	71.6	71.9	71.8	74.3	74.8	74.4	73.8	73.8
	27	59.9	65.4	69.3	72.4	74.8	75.8	75.2	73.9	74.4	73.8	73.4
	28	62.1	64.4	67.9	68.5	72.0	73.3	75.2	76.2	76.9	75.4	73.9
	29	61.1	65.8	70.8	73.4	75.1	76.7	76.4	73.0	66.3	66.6	67.8
	30	—	—	—	—	—	—	—	—	—	—	—
	31	65.4	66.5	72.4	74.1	75.9	77.1	79.3	80.1	80.5	80.9	79.9
Hourly Means		61.24	65.10	68.56	70.97	72.95	74.05	75.13	75.83	75.39	75.60	75.28

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
75.4	74.8	71.5	70.2	69.3	66.9	65.7	64.4	65.6	62.9	66.5	66.1	65.3	64.4	64.0	70.45
75.3	75.4	75.0	74.7	71.0	65.1	60.6	59.4	57.4	58.4	59.4	59.5	58.8	58.0	57.6	66.84
74.6	73.3	74.2	72.2	69.3	60.9	58.0	56.6	56.2	54.9	55.0	55.0	56.1	55.8	55.3	65.26
75.4	78.2	75.8	73.8	70.8	69.4	66.7	66.7	64.9	—	—	—	—	—	—	69.90
80.3	80.9	81.1	78.0	73.2	70.6	67.4	64.7	62.9	60.8	60.0	59.6	56.4	56.7	55.7	69.79
76.5	77.8	77.1	75.3	72.2	65.3	64.7	63.6	58.7	55.8	60.3	59.7	59.7	57.8	58.0	66.84
79.1	80.1	77.3	77.4	76.2	73.3	65.5	67.7	66.3	64.6	64.0	64.7	59.7	58.5	58.1	68.73
74.4	78.3	79.7	79.5	76.7	73.8	69.6	70.0	71.8	71.8	70.4	70.2	69.1	68.3	74.5	72.76
80.5	90.9	85.3	78.9	76.2	72.6	69.8	70.9	69.1	69.5	70.4	68.1	67.7	67.3	66.3	78.42
75.6	76.7	79.9	75.1	72.1	74.2	73.4	74.4	73.0	—	—	—	—	—	—	72.80
76.9	77.2	74.8	70.6	66.9	62.1	61.3	61.5	59.6	57.6	52.6	49.3	46.4	46.0	46.4	63.48
83.9	62.9	61.3	59.7	57.6	54.9	52.6	50.4	51.4	50.8	48.5	48.3	46.4	46.0	47.1	56.14
81.1	64.6	64.4	64.2	61.9	58.0	57.0	54.7	54.4	54.4	54.0	53.2	51.4	49.7	49.7	57.32
83.3	69.3	70.4	66.9	62.7	56.8	51.8	50.8	49.6	48.4	48.4	47.6	47.1	46.8	44.9	58.22
70.0	69.3	68.1	66.5	64.1	59.3	55.5	56.6	55.1	55.3	54.1	53.3	51.3	50.2	50.8	61.53
74.1	75.0	74.6	70.9	67.3	61.1	58.8	57.8	56.6	—	—	—	—	—	—	66.47
78.6	78.5	76.5	74.0	70.6	67.5	62.5	60.3	60.1	65.9	64.2	62.7	62.1	62.7	62.7	68.57
74.5	74.6	72.8	72.0	70.0	69.1	67.1	65.5	64.9	59.9	61.1	60.7	59.2	57.2	58.6	69.44
75.8	73.4	72.4	72.4	68.5	62.7	61.3	59.4	59.0	58.6	58.0	56.4	55.3	56.2	57.4	65.76
78.7	81.9	80.0	77.5	73.3	69.4	67.8	66.4	65.7	66.4	66.5	66.5	66.5	66.3	66.5	71.72
71.4	68.9	70.9	70.6	69.8	68.7	67.3	65.7	63.5	62.3	62.4	62.3	62.3	62.2	62.1	66.10
79.1	79.4	78.7	78.7	76.2	72.2	70.0	67.9	67.7	—	—	—	—	—	—	71.12
75.5	75.0	74.2	73.0	67.5	61.1	58.2	57.4	57.0	63.5	62.7	61.5	59.4	59.9	59.5	66.30
76.0	75.4	75.2	74.6	70.8	68.9	65.1	63.5	61.9	63.5	63.8	65.2	65.7	65.5	66.1	69.46
81.3	82.7	81.1	76.5	75.3	75.2	74.0	74.3	71.7	71.8	71.4	70.6	70.2	70.1	68.7	75.47
84.9	81.5	82.7	79.2	77.4	73.8	72.1	69.6	68.6	67.9	67.1	66.5	65.7	65.1	65.0	74.95
77.1	78.6	77.3	74.6	70.6	66.6	63.5	61.3	61.3	61.5	60.4	60.1	59.7	59.5	59.0	67.98
75.73	76.07	75.29	73.22	70.28	66.66	63.97	63.02	62.00	61.29	61.04	60.37	59.25	58.89	59.02	67.85
77.1	76.4	76.0	74.0	69.3	65.7	65.9	65.7	65.7	—	—	—	—	—	—	67.97
81.5	81.1	79.5	81.6	77.1	75.3	73.4	72.1	68.7	68.5	68.9	67.5	65.9	66.6	65.3	75.28
85.9	85.3	85.3	85.1	83.9	82.2	80.1	80.1	79.7	73.6	70.0	71.4	67.1	64.2	64.0	78.29
81.5	80.2	82.0	80.6	79.0	72.0	67.1	64.4	63.3	64.0	65.7	66.3	65.1	64.2	64.2	73.05
81.3	80.3	79.5	77.1	73.0	70.0	67.1	66.3	66.9	66.9	67.2	66.9	66.3	65.9	66.5	72.72
83.8	73.2	71.2	68.7	68.2	67.9	67.5	67.7	67.3	—	—	—	—	—	—	68.54
83.3	77.5	76.0	73.3	68.3	64.9	64.7	61.9	60.5	59.7	58.2	56.2	55.5	54.5	53.4	67.22
81.3	73.0	73.0	71.3	67.1	62.0	60.0	59.0	57.6	57.3	55.8	54.7	54.5	55.1	53.8	63.90
86.7	78.5	79.2	77.3	76.2	73.4	72.2	69.3	69.3	69.6	70.2	68.3	68.1	67.7	66.5	72.33
88.0	79.3	77.1	76.9	72.0	68.5	64.2	63.4	62.6	61.7	61.5	60.7	60.7	60.0	59.9	73.05
82.3	82.1	80.7	76.9	75.2	74.0	73.2	71.4	70.8	—	—	—	—	—	—	69.53
82.4	72.4	71.0	69.4	64.9	62.2	60.2	59.2	58.3	60.6	60.0	61.9	61.5	61.9	60.5	71.67
85.3	65.3	65.6	63.1	57.5	54.9	53.6	53.2	52.6	51.6	52.0	50.8	51.6	51.6	51.0	63.38
87.1	65.6	64.7	61.2	62.9	62.3	62.1	61.5	62.3	62.1	62.5	62.5	61.5	61.5	61.5	57.27
87.7	68.3	68.7	67.9	65.5	63.5	63.1	62.2	62.1	61.4	60.7	59.9	58.4	58.0	57.2	63.28
84.0	73.1	72.8	69.8	68.5	66.5	66.5	66.8	64.9	65.0	63.3	62.7	62.7	63.8	64.4	67.62
81.3	70.3	68.3	67.1	65.1	64.9	63.5	62.6	61.7	—	—	—	—	—	—	67.62
82.3	—	—	67.4	60.1	56.8	54.5	54.4	53.8	62.3	58.4	58.2	58.6	58.2	57.8	64.96
83.3	69.2	69.3	69.3	66.3	64.6	62.9	63.5	62.3	62.3	60.9	59.7	59.0	57.6	56.6	60.60
83.8	73.8	71.8	69.8	63.5	61.9	61.7	60.9	60.9	59.5	59.1	58.6	58.2	58.0	58.0	65.33
83.8	73.4	72.8	69.6	65.8	64.6	62.4	62.9	62.5	64.0	63.8	63.3	61.9	61.5	61.3	67.69
85.4	73.9	71.4	71.0	68.7	67.3	65.3	65.0	64.9	63.3	62.3	61.1	60.3	60.1	60.0	67.77
86.6	67.8	68.5	69.6	65.5	64.6	62.9	62.3	62.9	—	—	—	—	—	—	66.84
89.9	79.9	78.3	74.4	72.2	71.2	69.6	69.3	65.9	63.8	63.5	62.9	62.1	65.1	64.7	71.46
86.0	75.28	74.53	72.66	69.34	67.14	65.55	64.55	63.79	62.63	61.71	61.04	60.34	59.80	59.96	68.04

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
81.9	81.3	77.5	75.4	73.2	73.8	72.4	69.8	73.4	69.8	68.0	66.7	67.1	65.9	65.7	73.98
79.7	79.5	77.5	75.4	73.2	73.4	72.7	73.0	72.4	71.6	71.0	70.6	70.1	70.4	69.3	74.49
72.6	71.8	71.9	71.8	71.0	69.4	68.6	69.3	69.3	69.2	70.2	70.4	69.8	69.4	67.1	70.83
77.3	76.8	76.0	74.0	72.8	72.3	72.0	71.4	71.2	71.4	71.4	71.4	71.6	71.2	70.0	72.99
77.1	76.9	75.0	74.4	72.6	69.6	66.5	65.3	65.1	—	—	—	—	—	—	71.59
82.7	81.5	80.5	77.9	76.1	76.9	71.5	70.9	70.8	68.5	65.8	64.4	62.9	62.0	62.1	73.83
68.7	68.5	66.9	65.3	61.3	60.5	59.3	58.7	57.1	56.2	55.7	55.1	53.4	53.2	52.4	62.30
61.5	65.2	64.9	63.8	62.8	63.3	62.4	61.9	61.9	61.6	57.8	61.4	60.7	59.9	59.7	60.41
67.5	68.1	68.0	67.2	65.7	64.0	—	59.5	59.1	59.9	59.5	59.7	61.9	63.3	63.8	63.74
76.0	74.4	75.2	73.4	69.1	69.1	67.9	66.5	66.5	65.7	67.2	66.9	67.3	66.5	67.2	70.45
71.6	72.0	72.8	69.8	66.9	64.7	62.8	61.7	62.3	—	—	—	—	—	—	69.13
79.7	77.1	79.1	79.0	77.2	77.1	75.8	74.7	72.1	70.4	68.4	66.7	59.7	57.7	55.7	73.17
65.3	66.1	64.8	61.7	55.9	56.2	54.5	53.6	51.2	52.4	52.0	51.4	49.0	47.4	46.8	56.83
64.7	63.5	63.8	64.0	64.2	61.2	59.7	58.2	56.8	53.8	53.6	53.6	53.4	53.4	53.8	59.10
59.7	58.1	57.2	57.2	57.4	57.6	57.4	57.1	56.8	57.2	57.2	57.6	57.6	57.0	57.4	58.29
66.5	67.1	65.9	62.9	58.0	55.1	55.1	55.2	54.9	52.8	52.6	50.8	48.4	47.9	47.3	58.76
71.3	72.0	70.6	67.7	64.6	64.6	62.3	60.8	57.9	—	—	—	—	—	—	63.30
60.0	60.7	59.5	55.4	51.4	49.2	48.7	48.2	47.2	46.3	44.6	43.8	43.0	43.0	41.3	51.54
64.5	64.6	63.2	60.7	55.3	52.8	50.4	50.0	48.4	47.4	47.6	47.0	46.0	45.4	45.0	53.73
72.2	71.5	69.3	66.7	66.1	65.3	65.1	64.2	62.0	62.5	63.5	62.7	60.5	59.4	59.3	64.38
61.5	61.7	60.9	60.3	59.5	58.0	56.4	55.4	53.7	53.3	52.9	52.0	51.4	50.7	50.0	58.69
56.8	55.3	53.0	51.6	51.2	51.8	51.5	51.2	51.6	50.8	51.1	51.0	47.9	46.9	44.9	51.80
60.0	61.0	59.0	57.6	56.6	55.8	53.2	51.8	48.0	—	—	—	—	—	—	51.43
59.0	58.9	57.8	56.8	55.8	54.9	52.6	52.6	53.4	53.0	53.4	53.6	53.6	53.6	54.8	53.05
66.3	63.8	62.7	61.7	59.2	60.1	58.8	54.7	58.6	57.6	56.9	57.4	57.6	57.1	57.7	60.88
66.9	65.3	62.5	64.6	61.7	62.1	64.3	62.4	60.9	59.2	57.6	54.8	52.6	51.0	53.2	61.82
69.00	68.57	67.52	66.04	63.94	63.03	61.68	60.70	60.22	59.67	59.09	58.58	57.42	56.83	56.03	63.09
54.2	52.8	52.1	51.2	51.2	49.2	47.8	47.4	47.3	46.9	46.0	45.2	45.0	46.1	46.2	49.95
53.0	54.5	54.2	52.0	46.2	46.0	41.9	41.2	41.7	41.3	40.4	39.7	38.6	38.6	39.5	46.10
54.7	54.2	51.4	46.2	46.4	45.2	45.6	44.7	43.4	—	—	—	—	—	—	47.48
63.8	65.6	62.9	54.9	52.0	55.1	53.2	49.2	47.6	46.6	43.0	42.5	41.9	41.7	42.1	52.38
63.8	62.9	62.1	61.7	59.0	57.4	53.2	51.6	54.5	55.0	55.8	52.9	51.3	52.1	49.8	55.94
67.7	67.3	65.2	62.8	63.9	65.7	65.5	64.7	67.1	62.7	60.1	59.3	60.2	60.3	60.1	63.25
58.2	58.2	57.7	57.5	57.1	57.1	57.8	57.5	57.8	57.8	56.8	57.2	57.2	57.0	57.3	58.97
56.3	54.8	53.4	51.7	50.8	50.3	48.2	42.6	41.2	41.2	40.9	40.4	39.7	38.8	39.3	52.50
48.4	47.3	45.4	40.4	37.7	38.0	37.9	38.4	36.6	—	—	—	—	—	—	44.18
62.5	61.3	60.3	61.1	59.5	54.5	52.8	52.0	51.8	51.6	51.5	52.1	51.5	51.4	51.3	56.35
46.4	45.4	43.2	43.6	43.2	43.2	44.0	43.4	42.4	41.6	41.3	39.6	39.3	38.6	38.2	44.48
52.0	51.4	46.4	42.0	41.7	44.5	44.2	43.7	53.4	43.7	44.0	43.2	42.6	39.7	38.0	44.81
50.2	48.8	45.8	41.8	41.1	40.8	41.3	41.9	42.6	43.0	43.2	43.0	44.7	46.6	47.2	44.12
56.8	56.5	56.4	55.8	55.1	53.4	50.0	46.0	44.9	44.6	41.8	40.4	39.2	38.3	36.2	49.62
36.4	36.6	36.0	35.6	33.9	32.7	31.7	31.0	31.2	—	—	—	—	—	—	34.74
46.8	46.6	44.1	43.1	42.1	42.1	41.8	41.5	42.7	43.0	42.7	42.0	41.6	42.2	41.7	42.71
44.0	44.0	43.5	42.2	39.5	38.6	36.8	35.5	33.0	32.3	33.5	32.7	32.2	31.0	32.7	40.02
40.5	40.0	39.6	38.8	38.0	35.4	36.0	37.0	36.8	36.4	36.4	36.8	37.2	38.0	38.0	38.20
35.4	33.2	32.0	31.2	30.6	29.2	27.8	25.5	22.7	22.3	21.9	20.8	20.6	22.5	23.8	30.79
40.6	43.2	42.8	42.1	41.2	39.4	38.4	38.2	36.4	36.8	36.0	36.0	35.7	34.9	32.9	36.28
45.0	44.2	44.0	40.1	38.4	37.2	34.1	33.0	31.6	—	—	—	—	—	—	38.47
51.8	51.2	50.0	53.2	53.1	53.0	53.4	52.2	51.8	53.3	51.4	51.4	51.0	51.6	51.6	49.18
46.6	45.6	44.2	43.2	42.2	41.2	39.7	39.5	38.2	36.6	35.5	34.7	34.5	34.3	31.4	42.85
40.2	39.4	35.2	35.6	29.0	28.8	29.7	31.6	31.4	29.0	32.2	33.5	33.5	32.9	33.9	33.30
46.8	46.2	43.8	41.3	39.8	39.5	38.4	38.0	37.4	36.8	36.1	35.6	35.3	35.0	24.8	40.16
39.0	38.6	36.6	36.2	35.6	35.4	35.1	34.4	33.5	32.9	31.6	31.2	31.5	31.2	31.6	35.48
37.2	39.2	39.2	39.4	40.0	41.0	40.1	40.3	40.3	—	—	—	—	—	—	39.45
49.57	49.22	47.69	45.95	44.83	44.22	43.20	42.30	42.20	42.90	41.93	41.48	40.88	41.13	40.91	44.88

STANDARD THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	2	48°6	48°4	47°8	50°3	51°2	51°8	52°2	52°1	52°7	53°0	53°3
	3	46°6	46°8	47°6	49°1	50°2	52°7	53°4	52°2	52°4	52°2	52°1
	4	42°0	42°2	45°0	49°4	50°9	51°4	52°0	52°2	52°8	53°0	51°2
	5	36°9	37°4	40°5	43°8	47°2	49°2	50°0	49°6	48°8	49°4	47°6
	6	30°6	32°2	36°2	39°8	44°7	47°8	49°0	50°0	50°2	50°4	49°3
	7	39°0	40°7	41°9	43°6	45°8	48°3	49°7	48°9	49°7	49°7	49°0
	8	—	—	—	—	—	—	—	—	—	—	—
	9	49°7	49°6	50°4	51°0	53°4	53°4	54°1	51°2	53°9	53°5	53°9
	10	49°8	49°6	50°4	51°2	53°0	53°4	55°5	55°5	55°3	53°8	53°0
	11	50°9	51°1	51°2	51°2	51°6	52°0	51°6	51°8	51°6	52°6	52°9
	12	45°4	45°2	45°2	46°0	46°6	47°6	47°8	48°5	48°6	48°0	47°8
	13	46°0	46°2	46°2	46°2	46°5	46°4	46°0	46°1	46°8	46°8	46°1
	14	44°2	43°5	42°7	43°6	44°4	43°8	44°6	46°0	45°6	45°9	45°2
	15	—	—	—	—	—	—	—	—	—	—	—
	16	42°8	43°9	43°7	44°7	46°1	47°8	48°0	47°8	47°3	46°4	45°6
	17	39°6	41°3	43°6	45°0	47°0	46°2	47°0	49°2	48°0	47°6	47°1
	18	43°6	42°8	45°0	48°8	52°0	51°0	52°8	52°8	51°3	50°1	48°1
	19	41°9	41°6	41°2	40°4	40°7	41°5	41°5	41°2	41°0	41°4	40°5
	20	37°0	37°2	37°2	37°3	39°7	40°1	41°7	42°4	43°2	42°4	41°1
	21	37°4	36°8	37°4	38°1	38°5	39°9	40°6	41°0	42°1	43°0	42°1
	22	—	—	—	—	—	—	—	—	—	—	—
	23	30°3	30°0	30°2	31°6	33°3	33°9	34°7	36°0	37°4	36°8	36°2
	24	31°1	32°7	33°5	34°9	38°2	40°6	41°7	43°2	40°5	40°0	38°6
	25	25°3	22°1	20°2	20°2	19°8	20°4	20°8	21°3	21°6	21°4	21°7
	26	19°4	19°5	20°9	22°7	24°6	27°4	27°6	28°2	29°0	27°8	26°3
	27	24°2	22°5	22°9	24°1	25°8	26°9	28°4	30°0	31°1	32°9	33°7
	28	37°2	36°8	38°2	37°9	38°4	40°1	41°7	42°8	43°5	42°4	40°2
	29	—	—	—	—	—	—	—	—	—	—	—
	30	27°4	25°5	25°7	26°7	28°2	29°0	29°2	29°0	29°2	28°4	28°5
Hourly Means		38°80	38°62	39°39	40°72	42°31	43°48	44°06	44°19	44°57	44°36	43°71
DECEMBER.	1	13°9	13°0	15°6	19°1	20°8	23°2	24°9	26°7	27°4	27°6	28°1
	2	34°5	35°0	35°7	36°6	37°5	38°5	39°5	41°3	43°6	42°3	42°1
	3	34°4	34°1	33°5	33°4	34°0	34°3	34°2	34°1	33°5	32°7	31°6
	4	25°8	25°9	27°0	29°9	31°8	32°5	33°7	34°3	33°7	34°6	34°6
	5	29°9	29°5	29°5	30°8	32°4	33°5	34°3	34°7	34°3	34°3	33°5
	6	—	—	—	—	—	—	—	—	—	—	—
	7	34°3	34°9	35°5	37°0	37°4	38°1	38°6	39°1	39°0	38°9	39°1
	8	37°8	38°0	36°1	36°5	37°2	37°5	36°6	37°4	37°1	37°4	36°2
	9	32°5	32°4	31°9	31°4	31°4	31°7	32°3	32°8	33°0	32°9	33°1
	10	32°4	32°4	32°4	30°3	29°9	30°7	31°2	32°0	32°3	32°4	31°8
	11	25°5	24°4	23°6	24°0	25°8	27°6	28°1	28°5	28°9	29°3	29°5
	12	20°0	17°3	17°1	16°7	16°0	17°2	18°0	18°1	19°8	20°6	21°0
	13	—	—	—	—	—	—	—	—	—	—	—
	14	16°2	16°3	17°0	16°6	16°9	18°2	20°2	22°1	23°2	21°9	21°4
	15	7°7	7°1	9°0	12°4	17°8	20°0	23°4	25°3	26°5	27°2	25°9
	16	12°8	13°0	14°3	18°8	22°1	26°7	27°6	28°2	27°6	27°1	26°1
	17	22°3	22°5	23°2	24°8	26°1	26°3	27°4	26°5	27°1	27°8	26°9
	18	12°8	12°6	12°1	16°0	19°2	22°7	25°6	28°5	30°6	29°8	28°8
	19	29°5	29°5	29°0	28°8	29°8	31°2	32°3	33°5	31°8	32°9	32°3
	20	—	—	—	—	—	—	—	—	—	—	—
	21	22°1	20°8	18°9	19°6	21°2	23°2	24°9	26°5	27°9	27°6	26°3
	22	22°1	20°6	20°4	21°5	22°3	22°5	24°2	24°2	26°1	26°1	25°5
	23	7°1	3°7	4°5	9°2	14°8	18°2	20°5	22°1	23°6	23°8	23°9
	24	27°5	28°1	28°8	29°9	31°2	33°9	34°1	33°9	34°4	34°6	34°7
	25	—	—	—	—	—	—	—	—	—	—	—
	26	16°6	16°6	16°7	18°8	22°9	26°7	29°7	30°3	31°2	32°9	31°2
	27	—	—	—	—	—	—	—	—	—	—	—
	28	35°2	34°9	35°2	34°9	36°0	34°3	31°7	32°9	31°2	31°3	31°0
	29	19°4	19°0	20°2	22°3	26°1	27°4	27°6	27°8	28°1	28°6	28°5
	30	36°6	37°0	36°8	37°5	37°8	39°1	38°9	40°3	39°6	38°7	37°6
	31	34°1	34°3	35°3	37°4	38°6	39°1	39°1	40°0	40°5	40°3	39°4
Hourly Means		24°73	24°34	24°59	25°93	27°58	29°01	29°95	30°78	31°24	31°29	30°77

			STANDARD THERMOMETER.												Daily and Monthly Means.
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
53.0	53.3	53.0	52.7	52.0	52.2	51.8	50.6	50.4	49.2	49.4	46.0	42.6	43.6	44.9	49.99
52.2	52.1	49.0	49.0	48.8	48.8	49.2	49.2	47.4	43.4	42.1	40.6	41.7	41.2	42.0	47.81
53.0	51.2	44.0	45.4	43.6	42.6	41.3	40.8	40.4	40.2	39.4	38.7	38.8	38.0	37.6	44.87
49.4	47.6	43.3	38.6	35.6	35.8	36.1	34.1	32.7	30.9	31.8	31.6	31.3	30.5	32.4	39.40
50.4	49.3	46.4	44.8	42.0	39.2	37.7	37.0	37.5	37.5	36.0	38.4	37.6	37.6	38.2	41.25
49.7	49.3	49.0	50.2	50.1	50.9	50.6	50.0	50.0	—	—	—	—	—	—	—
53.5	53.9	52.8	52.8	52.4	52.2	52.3	52.2	51.8	49.0	49.2	49.4	49.7	49.7	50.2	48.11
53.8	53.0	52.0	51.8	52.0	52.0	52.6	52.8	52.6	51.6	51.0	51.0	50.8	50.3	50.0	52.02
52.6	52.6	52.0	51.0	50.8	50.4	49.0	48.0	47.2	47.1	46.9	47.2	47.0	47.0	46.4	49.93
48.0	47.8	47.2	47.0	47.1	46.9	46.6	46.6	46.0	45.8	46.2	46.2	46.2	46.3	46.1	46.70
46.8	46.8	46.4	46.4	46.6	46.6	46.4	46.0	45.2	44.9	45.2	44.9	44.7	44.6	44.7	45.95
45.9	45.2	44.4	44.7	46.0	46.6	47.2	47.0	46.6	—	—	—	—	—	—	—
46.4	45.6	45.6	47.2	45.0	44.7	44.6	44.6	44.4	44.0	43.0	43.6	42.1	42.2	42.7	44.61
47.6	47.4	47.0	46.2	46.6	46.4	47.2	47.7	48.1	47.5	46.8	46.1	46.4	45.8	44.3	44.64
50.1	48.1	47.0	44.5	44.6	44.3	43.9	43.6	42.9	42.9	42.4	42.4	42.1	41.9	41.9	46.14
41.4	40.5	38.9	38.6	38.6	39.7	38.0	38.2	36.8	36.6	36.8	36.6	36.6	36.4	36.2	39.20
42.4	41.4	39.4	38.8	38.2	37.6	36.8	35.6	34.7	33.7	34.7	35.4	36.8	38.0	37.4	38.21
43.0	42.1	42.1	42.0	42.2	41.6	45.0	45.4	44.0	—	—	—	—	—	—	—
39.8	36.2	35.2	35.2	34.7	34.9	34.9	34.7	36.1	31.7	31.8	31.1	31.3	31.5	29.8	38.74
40.0	38.6	34.6	34.1	32.4	32.1	31.6	31.0	30.6	30.6	29.5	28.8	27.4	26.1	25.9	33.86
21.4	21.7	21.1	20.7	20.2	18.7	18.8	18.6	18.2	18.2	18.1	19.0	20.6	20.7	19.4	20.31
27.8	26.3	24.8	24.6	25.3	25.7	25.5	25.3	26.9	26.9	26.9	26.7	26.1	26.1	24.8	25.38
32.9	33.7	34.7	34.0	36.0	35.1	35.1	34.1	34.9	35.6	35.5	35.2	35.3	36.6	37.2	31.85
42.1	40.2	39.0	38.6	37.8	38.0	35.8	34.4	33.0	—	—	—	—	—	—	—
28.4	28.5	27.1	24.8	23.4	22.7	20.5	19.4	19.0	30.9	29.7	29.1	29.6	29.5	30.3	36.45
—	—	—	—	—	—	—	—	—	18.2	16.6	15.2	14.5	15.0	14.3	23.23
41.36	43.71	42.41	41.79	41.28	41.15	40.74	40.28	39.90	38.71	38.72	38.20	37.91	37.86	37.72	40.87
27.6	28.1	28.9	18.9	30.3	31.2	32.2	32.2	32.7	32.7	32.5	32.9	33.1	33.5	33.5	27.31
42.3	42.1	43.6	43.0	45.2	45.0	43.6	41.8	40.2	48.9	43.2	41.5	37.8	37.0	35.2	41.07
32.7	31.6	31.4	31.0	30.3	30.1	28.5	26.9	25.9	25.3	25.6	25.7	25.7	25.8	25.8	30.20
34.6	34.6	34.7	34.5	34.5	33.3	32.3	32.3	32.2	32.0	31.8	31.9	32.0	30.9	29.9	31.92
31.3	33.5	34.9	32.0	31.1	31.0	31.0	30.4	30.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	32.2	32.7	32.7	32.7	33.5	33.5	32.20
38.9	39.4	40.1	40.5	40.4	39.6	39.1	38.4	38.7	38.8	38.6	38.6	38.2	37.8	38.1	38.46
37.1	36.2	34.7	33.9	34.1	33.9	33.5	33.3	33.1	33.3	33.1	31.9	31.2	31.6	32.8	34.94
32.9	32.9	33.1	32.7	31.6	31.2	31.2	31.0	30.7	30.3	30.0	30.0	29.3	28.1	28.1	31.49
32.4	31.8	31.0	31.0	29.9	28.1	27.5	27.0	27.6	27.5	27.4	27.1	27.1	27.2	26.3	29.69
29.3	29.5	29.2	29.7	29.5	29.5	29.2	29.2	28.1	26.5	24.5	20.4	19.6	18.4	19.0	26.04
20.6	21.0	21.4	21.5	21.7	20.2	19.1	17.5	17.1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	15.6	15.8	15.4	15.6	15.4	16.2	18.11
21.9	21.4	20.6	19.4	18.4	16.6	15.5	13.2	10.5	10.5	12.0	12.2	12.7	9.0	9.3	16.25
27.2	25.9	24.9	17.7	15.6	13.4	12.0	11.4	10.7	11.0	9.6	10.5	12.1	11.6	11.6	15.49
27.1	26.4	23.2	22.9	24.6	27.8	23.7	23.9	22.1	22.1	22.7	22.8	23.5	22.5	22.5	22.84
27.8	26.9	24.1	19.3	17.1	18.8	19.8	19.6	18.2	16.2	16.4	15.6	15.4	15.2	14.8	21.31
29.8	28.8	29.0	29.0	28.1	27.4	30.1	29.5	30.8	36.6	30.4	30.4	30.1	29.5	29.6	25.97
32.9	32.3	31.5	31.2	30.8	30.1	29.5	29.7	29.5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	25.3	24.5	23.6	22.8	23.6	22.4	28.96
27.6	26.3	24.4	16.4	15.0	14.8	15.2	17.3	18.9	19.6	21.7	22.9	24.4	26.5	26.0	21.63
26.1	25.5	24.9	20.4	19.4	22.1	22.9	23.0	22.6	20.4	16.4	8.6	13.7	11.2	8.4	20.27
23.8	23.9	15.8	13.7	17.6	16.7	19.5	16.2	12.6	13.7	15.6	15.5	15.6	16.6	21.7	15.93
34.6	34.7	35.3	35.3	36.0	35.9	35.4	35.6	36.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	21.7	21.5	21.5	21.2	20.2	16.9	30.16
32.9	31.2	33.0	33.5	33.7	34.1	34.3	35.3	36.0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	41.1	39.5	39.4	38.7	38.8	36.1	31.13
31.3	31.0	30.2	29.5	29.3	27.4	26.1	25.7	25.3	26.8	23.4	21.9	22.5	21.7	20.8	29.10
28.6	28.5	29.1	28.4	30.7	30.8	31.8	32.4	32.9	33.1	33.1	34.9	35.4	35.4	36.0	29.03
38.7	37.6	36.8	36.4	36.2	35.8	35.0	34.7	34.9	34.7	35.4	35.8	34.4	34.1	34.5	36.61
40.3	39.4	38.6	38.2	38.2	37.4	37.6	37.0	36.9	37.2	37.0	37.3	36.6	36.7	36.8	37.65
31.29	30.77	29.76	28.91	28.81	28.55	28.32	27.98	27.88	27.25	26.65	26.14	26.19	25.91	25.62	27.84

STANDARD THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.												
1	36.7	36.7	36.2	35.9	35.7	35.8	35.9	35.7	34.9	34.8	33.8	33.4
2	36.1	35.5	35.7	35.4	36.7	36.7	37.4	37.3	36.8	36.0	35.5	35.3
3	—	—	—	—	—	—	—	—	—	—	—	—
4	34.0	34.5	34.6	34.9	35.3	36.5	34.8	34.3	34.8	34.8	34.9	35.4
5	37.1	36.5	36.8	35.7	36.3	37.5	37.9	38.3	37.6	35.9	35.3	35.3
6	30.4	30.7	30.9	32.2	33.4	34.4	34.2	33.8	33.2	33.2	33.0	32.1
7	29.3	28.1	27.6	26.8	26.2	25.8	25.6	23.7	23.5	25.1	23.9	22.0
8	10.2	8.3	7.5	7.5	8.1	9.1	9.6	10.8	10.8	11.0	10.4	10.0
9	11.4	11.4	11.4	12.7	14.1	15.2	17.4	19.8	20.2	19.3	18.5	18.2
10	—	—	—	—	—	—	—	—	—	—	—	—
11	2.1	1.4	1.0	6.1	10.9	11.7	12.0	12.6	13.8	14.8	14.5	13.8
12	12.9	13.0	13.8	14.6	16.0	17.2	17.6	18.1	18.7	18.3	17.4	15.5
13	24.9	25.4	26.2	27.5	30.7	31.1	32.1	34.2	35.0	34.7	33.9	33.0
14	35.5	35.7	36.1	36.1	36.6	37.1	38.5	40.2	39.6	39.4	38.7	37.8
15	36.9	36.9	37.1	38.3	38.6	39.0	40.4	42.0	41.8	40.7	39.6	40.2
16	36.1	35.5	33.8	33.0	32.7	32.7	33.7	30.3	28.3	24.7	22.3	18.5
17	—	—	—	—	—	—	—	—	—	—	—	—
18	31.1	32.5	32.7	33.1	34.0	35.3	35.2	35.2	35.2	34.2	33.4	32.3
19	10.8	9.2	9.3	8.9	10.4	11.0	11.4	10.8	11.4	10.6	9.6	8.2
20	6.2	6.0	7.1	9.8	14.4	18.3	20.1	20.8	21.4	21.5	21.3	20.0
21	14.0	13.5	12.9	13.3	13.8	13.3	9.8	9.8	8.7	6.5	5.9	4.6
22	7.5	7.1	6.5	8.5	8.5	11.3	11.3	13.8	14.2	14.1	14.6	15.3
23	22.5	23.3	24.8	27.7	30.1	32.5	32.5	32.8	33.0	33.0	33.4	30.2
24	—	—	—	—	—	—	—	—	—	—	—	—
25	18.1	18.1	18.3	21.3	24.5	25.4	25.8	25.6	25.8	25.8	25.8	25.1
26	25.9	29.3	32.8	33.2	33.8	34.4	34.6	32.5	28.6	26.8	26.6	26.5
27	12.5	12.7	13.3	15.1	15.7	15.7	15.5	15.9	15.8	15.6	14.4	12.2
28	3.8	4.8	4.9	8.6	12.3	16.7	19.3	20.4	21.4	22.5	21.8	20.3
29	21.4	23.3	24.3	25.6	27.5	29.1	30.9	32.5	33.2	30.9	29.3	28.5
30	22.2	21.9	19.2	19.3	19.3	17.8	18.1	17.8	17.8	16.7	15.7	14.0
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	21.75	21.97	22.11	23.12	24.15	25.41	25.83	26.12	25.98	25.42	24.75	23.76
FEBRUARY.												
1	23.8	24.6	25.1	25.9	28.1	30.5	32.1	32.8	32.4	32.8	32.6	31.7
2	28.6	28.8	31.3	34.8	38.9	39.2	39.7	40.2	40.6	39.9	39.2	39.1
3	37.9	37.9	37.6	37.6	37.5	37.4	37.6	37.9	35.7	32.4	29.3	26.3
4	12.2	12.4	12.2	13.2	15.1	17.2	19.3	22.4	23.6	24.2	23.0	21.8
5	10.6	9.6	8.9	12.1	13.7	15.6	17.9	19.3	21.5	21.7	22.0	21.7
6	13.7	12.4	13.9	16.0	17.8	20.1	23.0	25.7	27.3	28.3	28.5	27.7
7	—	—	—	—	—	—	—	—	—	—	—	—
8	29.0	28.6	29.0	30.5	32.4	34.3	34.7	35.7	35.2	35.7	35.3	32.3
9	29.0	27.3	27.1	29.5	30.7	32.2	32.3	32.6	32.3	31.8	32.0	31.1
10	26.9	27.0	26.7	28.5	29.8	31.8	32.4	35.3	34.8	33.8	32.1	29.4
11	16.7	17.0	16.3	17.8	20.7	21.3	21.6	22.2	21.7	21.6	21.3	19.7
12	13.3	14.9	14.3	17.0	20.9	23.2	23.8	25.1	27.1	24.3	22.5	20.4
13	16.0	15.8	16.0	17.9	21.4	23.6	24.5	24.9	25.7	25.7	25.6	25.3
14	—	—	—	—	—	—	—	—	—	—	—	—
15	29.8	29.0	27.8	26.8	27.4	26.5	24.7	24.0	23.0	23.1	22.8	21.3
16	17.8	12.2	17.0	17.8	13.1	13.4	14.0	21.8	23.4	24.7	23.8	20.7
17	21.0	21.0	21.3	24.9	29.2	31.3	30.2	30.9	31.1	32.3	32.3	30.5
18	22.0	22.2	24.2	26.2	30.2	32.3	33.2	34.6	33.5	33.1	32.5	31.7
19	28.1	27.6	27.5	27.1	27.9	29.8	30.9	30.9	32.3	32.7	32.3	31.3
20	26.7	26.2	25.5	24.0	23.0	22.8	23.6	23.2	22.8	23.0	22.4	22.2
21	—	—	—	—	—	—	—	—	—	—	—	—
22	15.8	15.8	15.9	16.6	17.8	20.2	19.7	20.7	20.5	20.9	20.9	20.7
23	4.4	3.2	4.6	7.2	9.7	11.7	14.3	15.7	17.4	17.9	18.7	16.8
24	3.6	2.8	7.4	10.0	15.4	19.7	21.8	22.8	23.0	23.2	22.2	21.8
25	18.3	17.8	18.1	21.1	23.4	24.9	25.9	26.2	26.6	26.5	26.0	24.6
26	9.1	10.3	17.3	21.8	26.9	27.8	27.5	27.7	27.1	26.3	25.9	25.7
27	26.9	27.1	28.5	27.6	28.3	29.4	29.8	30.4	31.1	31.2	32.2	32.5
28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Mean	20.05	19.65	20.62	22.16	24.14	25.68	26.44	27.63	27.90	27.80	27.31	26.10

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
34.8	33.8	33.4	32.8	32.5	32.8	32.5	32.9	34.1	35.0	34.8	36.3	36.3	36.2	36.1	34.91
6.0	35.5	35.3	35.4	35.4	34.9	35.1	35.1	35.1	—	—	—	—	—	—	34.33
34.8	34.9	35.4	35.4	37.1	36.7	38.5	39.8	42.2	41.6	40.6	38.9	38.6	37.4	37.3	36.79
35.9	35.3	35.3	35.7	35.9	36.1	35.5	35.5	35.5	34.2	33.0	33.0	30.2	30.2	30.3	35.22
35.2	33.0	32.1	31.7	31.5	31.1	30.7	30.4	30.2	29.8	29.6	29.8	29.9	30.1	30.0	31.51
35.1	23.9	22.0	19.1	17.4	16.4	15.9	16.8	14.4	14.8	13.8	12.9	15.1	14.9	12.9	20.50
1.0	10.4	10.0	10.3	10.3	10.2	9.5	8.3	8.4	9.3	9.9	10.2	10.4	10.8	10.8	9.65
9.3	18.5	18.2	18.1	18.0	18.1	17.4	17.2	17.0	—	—	—	—	—	—	12.88
34.8	14.5	13.8	13.1	12.5	11.7	11.7	11.9	11.8	—	7.5	5.0	2.4	0.0	0.0	—
8.3	17.4	15.5	13.1	13.5	14.2	15.1	15.5	15.1	13.5	20.7	22.0	20.8	23.3	24.2	10.61
14.7	33.9	33.0	32.3	32.4	31.9	32.7	32.5	33.3	35.1	35.8	35.7	36.1	35.9	35.9	16.84
39.4	38.7	37.8	37.1	36.4	35.7	36.1	36.3	36.3	34.7	35.3	35.3	35.7	36.7	37.0	32.43
40.7	39.6	40.2	41.1	41.1	42.7	42.2	42.2	42.7	41.6	41.2	40.1	38.6	37.8	36.1	36.83
21.7	22.3	18.5	16.1	14.2	13.3	12.9	12.3	12.0	—	—	—	—	—	—	39.95
34.2	33.4	32.3	30.7	30.0	29.1	28.1	26.8	24.9	22.2	23.3	24.7	26.4	27.0	28.7	24.78
10.6	9.6	8.2	7.8	7.1	6.9	7.4	7.4	7.3	7.3	7.2	6.8	6.8	6.8	6.5	28.62
21.5	21.3	20.0	19.4	18.9	18.1	16.9	16.9	15.3	14.4	13.5	14.5	14.0	14.4	14.2	8.62
6.5	5.9	4.6	3.8	2.5	3.9	5.8	5.6	5.4	5.4	5.6	6.0	6.2	6.9	6.9	15.73
14.1	14.6	15.3	14.6	13.5	15.1	16.1	18.9	19.6	20.5	20.5	20.1	19.9	20.7	22.2	7.92
33.0	33.4	30.2	28.9	—	25.1	23.3	21.9	22.4	—	—	—	—	—	—	14.77
25.8	25.8	25.1	25.1	25.1	26.0	26.8	26.8	26.1	24.8	24.4	27.2	28.1	26.9	25.5	25.28
26.8	26.6	26.5	26.4	24.2	23.5	22.2	22.0	22.2	22.2	18.9	17.2	17.0	15.3	14.0	24.68
15.6	14.4	12.2	10.4	8.3	6.8	6.0	5.2	5.0	4.8	4.0	3.0	2.1	2.6	3.8	25.42
22.5	21.8	20.3	19.9	18.1	18.3	17.4	16.1	19.9	17.6	19.1	19.5	20.0	19.7	20.5	9.85
30.9	29.3	28.5	28.4	28.3	27.0	26.3	25.6	24.4	23.0	22.2	22.7	23.8	23.8	23.3	16.79
16.7	15.7	14.0	12.1	11.0	10.6	10.6	10.3	10.1	—	—	—	—	—	—	26.47
—	—	—	—	—	—	—	—	—	24.3	23.0	23.0	22.3	22.1	22.4	17.57
25.42	24.55	23.76	23.03	22.36	22.16	22.03	21.93	21.95	21.98	21.44	21.58	21.44	21.44	21.29	23.06
32.8	32.6	31.7	31.7	31.3	32.1	31.9	31.2	30.9	31.3	29.4	28.3	30.4	30.5	29.0	30.02
39.9	39.2	39.1	40.0	40.4	39.9	39.1	37.9	37.3	38.1	37.9	38.3	38.6	37.5	36.9	37.59
32.4	29.3	26.3	25.6	21.7	19.9	18.7	17.4	16.6	16.6	16.7	15.2	14.4	13.8	12.6	26.36
24.2	23.0	21.8	20.3	19.1	17.8	16.8	16.2	16.0	15.4	14.5	14.1	13.6	13.0	11.6	16.88
21.7	22.0	21.7	21.7	22.2	21.1	20.7	19.8	18.4	18.1	18.0	16.2	15.8	14.1	13.4	17.30
28.3	28.5	27.7	24.7	22.4	22.2	21.7	20.9	20.9	—	—	—	—	—	—	22.60
35.7	35.3	32.3	31.7	31.7	31.1	32.1	32.4	32.8	32.4	32.2	31.9	31.1	31.2	30.2	32.23
1.8	32.0	31.1	30.2	29.6	29.4	29.6	29.6	28.2	29.4	25.1	23.0	21.5	24.4	26.0	28.91
3.8	32.1	29.4	28.8	26.9	26.3	24.2	20.3	17.4	15.6	12.8	11.7	15.0	15.5	15.8	24.95
1.6	21.3	19.7	18.7	17.9	17.4	16.4	17.5	17.5	17.1	17.0	17.0	16.1	14.4	12.4	18.22
4.3	22.5	20.4	19.3	18.6	18.1	16.7	15.9	10.6	11.6	13.7	14.9	16.8	17.9	16.6	18.23
5.7	25.6	25.3	25.1	24.0	23.9	23.2	23.0	23.0	—	—	—	—	—	—	24.30
3.1	22.8	21.3	20.5	20.7	20.3	19.5	18.1	17.0	16.8	17.9	19.1	19.7	18.9	18.7	22.23
4.7	23.8	20.7	21.5	22.4	22.2	23.5	20.3	19.1	19.3	20.1	19.8	19.8	20.0	19.9	19.48
2.3	32.3	30.5	29.4	27.1	25.7	22.7	20.5	19.6	16.9	16.0	16.6	16.6	19.6	21.0	24.49
3.1	32.5	31.7	29.8	30.0	29.1	28.5	28.1	28.1	28.1	28.5	28.6	28.6	28.1	27.9	29.13
2.7	32.3	31.3	30.9	30.8	30.5	30.5	30.2	29.8	29.2	29.2	29.0	28.5	28.1	27.3	29.68
3.0	22.4	22.2	22.2	22.2	22.0	21.8	21.5	21.7	—	—	—	—	—	—	21.62
0.9	20.9	20.7	20.6	19.5	17.6	15.6	11.7	10.6	9.9	8.7	8.2	7.0	6.5	7.9	15.39
7.9	18.7	16.8	10.8	6.0	4.2	6.4	7.8	5.2	1.6	4.6	5.2	5.4	4.6	4.0	8.64
3.2	22.2	21.8	21.1	21.2	22.3	21.1	21.4	21.3	21.7	20.9	20.1	20.1	20.1	19.6	18.53
3.5	26.0	24.6	21.4	15.0	12.6	13.7	13.0	12.8	13.0	12.1	9.9	9.1	9.1	10.8	18.00
3.3	25.9	25.7	26.1	26.5	26.9	28.2	28.5	28.3	28.5	28.5	28.2	28.1	28.1	28.1	25.31
1.2	32.2	32.5	33.1	33.1	33.1	33.1	32.1	31.1	—	—	—	—	—	—	28.08
—	—	—	—	—	—	—	—	—	20.3	20.5	21.3	21.1	20.6	19.6	—
27.80	27.31	26.10	25.13	24.18	23.57	23.15	22.30	21.43	20.81	20.72	20.43	20.49	20.42	20.06	23.26

STANDARD THERMOMETER.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	1	20.1	20.3	22.2	24.2	24.9	26.4	27.8	28.9	29.6	29.6	28.9
	2	19.2	18.4	21.2	23.0	24.6	26.0	27.7	30.7	30.9	30.2	29.2
	3	23.0	27.0	27.8	29.3	31.1	33.8	34.8	34.0	35.8	36.0	35.5
	4	13.9	14.2	21.3	25.7	27.5	29.0	30.8	32.0	33.0	33.3	32.2
	5	12.2	9.8	12.8	18.8	25.2	28.4	28.9	29.9	31.0	30.5	30.5
	6	28.8	29.4	31.9	34.0	34.5	36.5	35.7	35.6	35.5	35.1	34.0
	7	—	—	—	—	—	—	—	—	—	—	—
	8	25.0	26.3	28.8	30.0	31.6	34.6	35.8	36.2	31.7	32.0	31.7
	9	19.1	19.1	18.8	20.3	21.8	21.8	21.5	21.3	21.4	21.4	21.3
	10	22.7	23.4	27.3	31.0	33.8	35.2	36.1	36.8	37.1	37.1	36.4
	11	15.0	15.2	17.1	19.6	20.1	20.6	20.8	21.7	22.5	22.5	21.9
	12	6.4	6.8	10.6	15.3	17.8	19.1	20.2	21.3	22.5	23.4	22.5
	13	10.3	9.9	12.6	15.4	19.4	21.8	23.6	24.3	26.9	26.5	25.1
	14	—	—	—	—	—	—	—	—	—	—	—
	15	13.9	15.2	16.4	17.9	19.7	22.7	21.5	24.3	24.4	23.3	22.1
	16	10.0	10.2	13.0	15.0	18.3	19.5	22.7	20.2	24.0	22.7	21.7
	17	15.0	16.5	20.0	23.8	27.0	33.5	33.1	35.1	34.6	34.3	33.8
	18	29.2	30.2	32.5	34.6	35.1	38.1	38.6	38.9	40.3	40.2	42.8
	19	24.6	26.3	29.8	31.3	34.7	36.0	37.3	36.6	36.4	37.0	37.3
	20	32.9	33.1	33.1	34.5	35.7	37.2	39.0	39.9	38.4	38.6	37.3
	21	—	—	—	—	—	—	—	—	—	—	—
	22	25.7	27.3	29.6	30.7	31.3	31.6	32.0	32.2	32.0	31.8	31.7
	23	33.8	34.7	34.7	34.9	36.1	37.5	40.2	39.2	41.6	41.6	40.4
	24	28.2	29.2	30.3	32.4	33.2	34.9	35.4	37.3	37.3	38.7	37.9
	25	31.5	33.5	38.6	41.2	44.1	42.5	42.1	41.2	42.5	42.4	41.6
	26	32.4	31.5	32.4	32.0	33.4	33.8	34.3	36.1	37.4	36.7	34.8
	27	18.5	17.9	18.9	20.5	22.1	23.3	23.8	24.4	24.7	25.5	25.5
	28	—	—	—	—	—	—	—	—	—	—	—
	29	32.0	34.0	37.4	40.7	42.5	43.4	44.4	43.1	40.8	38.5	36.9
	30	23.6	23.8	26.9	26.5	27.1	28.4	27.8	26.7	26.5	25.7	24.8
	31	14.3	16.2	17.9	18.7	20.8	22.3	24.3	25.5	26.1	27.0	27.0
Hourly Means	21.66	22.20	24.59	26.81	28.64	30.24	31.21	31.53	32.05	31.89	31.33	30.75
APRIL.	1	9.2	13.9	19.2	27.5	29.8	31.3	31.8	32.4	32.2	34.3	32.8
	2	—	—	—	—	—	—	—	—	—	—	—
	3	28.6	31.9	34.5	38.5	40.0	42.2	42.6	41.9	41.1	41.2	39.9
	4	—	—	—	—	—	—	—	—	—	—	—
	5	31.4	36.7	39.7	40.8	41.9	41.7	41.5	41.8	42.2	39.8	40.1
	6	38.3	38.8	41.5	43.1	44.4	46.5	44.0	45.6	46.1	48.4	49.1
	7	40.0	42.1	42.9	43.6	46.3	48.4	50.6	52.2	53.9	55.6	55.5
	8	41.9	41.7	43.1	45.1	48.1	49.9	58.3	58.1	55.0	55.8	59.9
	9	34.3	35.3	36.6	39.5	41.3	42.9	45.0	43.8	45.5	46.3	45.7
	10	38.5	41.2	45.2	46.2	48.4	47.4	47.6	49.2	48.5	44.3	44.5
	11	—	—	—	—	—	—	—	—	—	—	—
	12	33.5	36.5	44.2	46.1	48.7	48.7	48.3	48.7	47.1	47.4	46.9
	13	29.3	36.8	40.5	42.6	44.0	44.5	46.5	46.9	47.1	45.7	45.7
	14	31.7	35.4	39.4	43.5	45.6	46.3	45.8	46.3	45.9	45.5	43.4
	15	31.7	33.0	34.3	35.7	34.9	37.7	37.4	36.9	37.6	38.9	37.1
	16	25.9	29.2	32.3	37.6	38.5	38.6	40.0	40.5	38.4	36.4	37.0
	17	33.8	33.4	34.3	35.1	36.0	36.2	36.2	35.5	34.7	33.0	33.4
	18	—	—	—	—	—	—	—	—	—	—	—
	19	29.6	31.3	33.1	35.1	36.7	39.8	42.7	42.5	44.0	44.4	45.9
	20	34.4	36.0	37.4	39.7	41.7	44.5	46.2	45.1	44.6	43.6	43.0
	21	42.6	41.6	43.4	45.4	45.9	54.4	57.0	63.3	65.5	65.4	65.0
	22	49.3	49.9	52.4	51.2	51.0	49.3	47.9	46.9	45.9	45.5	45.3
	23	36.3	36.4	36.9	38.9	40.0	40.7	41.2	41.0	42.9	45.9	42.8
	24	31.0	34.5	38.5	41.6	43.0	44.0	41.8	45.4	45.2	44.7	45.5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	47.9	49.1	50.7	53.2	55.8	58.4	59.9	58.0	58.5	56.5	58.5
	27	43.8	44.5	43.8	42.4	42.0	42.9	43.4	43.6	44.6	43.8	42.6
	28	39.5	33.7	36.8	40.0	40.2	42.5	43.2	40.7	40.1	39.6	37.1
	29	34.9	35.5	36.1	36.5	36.1	37.3	39.2	39.7	41.6	45.1	41.5
	30	36.7	37.1	37.9	40.7	41.9	43.6	44.5	45.0	47.5	48.1	44.5
Hourly Means	34.60	36.75	38.99	41.20	42.49	43.99	45.02	45.25	45.39	45.37	44.91	43.92

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
29.6	28.9	27.0	26.4	26.1	25.4	25.7	25.2	24.4	24.0	23.5	23.5	22.0	21.6	19.5	24.92
30.2	29.2	27.0	27.6	27.4	24.3	23.7	23.5	23.4	21.2	21.5	20.5	20.1	21.2	22.5	24.17
36.0	36.0	35.5	33.6	31.7	31.3	25.6	24.2	20.0	20.9	19.1	22.9	24.4	24.3	18.4	28.37
33.3	32.2	31.6	30.5	29.2	27.8	26.4	22.0	20.1	18.5	16.2	15.9	13.6	13.6	14.1	23.85
30.5	30.5	30.4	28.2	24.5	25.6	26.8	26.2	25.2	25.1	26.6	27.6	28.0	27.6	27.3	25.30
35.1	34.0	31.5	32.6	32.6	32.8	33.1	32.5	32.6	—	—	—	—	—	—	—
2.0	31.7	31.2	27.1	24.2	22.4	20.8	20.0	19.1	18.9	18.8	18.5	18.6	18.9	19.1	25.89
11.4	21.3	20.9	21.5	21.8	22.5	24.0	25.2	25.7	24.8	23.0	22.9	22.2	22.4	22.5	21.97
7.1	36.4	35.5	33.5	32.0	30.3	24.3	21.6	20.3	20.1	19.8	19.3	17.1	16.5	14.5	27.57
2.5	21.9	21.6	19.9	17.8	16.4	14.0	11.5	10.1	8.9	8.6	6.1	4.5	5.0	4.9	15.28
3.4	22.5	21.5	19.5	19.1	16.8	15.8	14.1	13.5	13.3	12.9	13.2	13.2	12.3	11.1	15.91
6.5	25.1	24.6	22.4	20.4	19.0	18.6	18.3	18.3	—	—	—	—	—	—	20.10
2.3	22.1	21.5	19.4	17.5	16.3	13.9	13.6	13.6	13.9	12.7	12.4	12.2	12.1	10.5	17.08
2.7	21.7	22.0	21.7	20.4	19.0	17.3	15.7	14.7	13.9	13.2	13.0	12.5	13.6	15.5	17.08
4.6	34.3	33.8	31.7	30.8	30.7	30.3	29.9	30.0	30.2	30.2	29.8	29.1	29.6	29.6	29.19
0.2	42.8	42.1	39.1	36.3	33.6	31.9	29.9	28.7	27.6	26.9	26.2	26.3	26.2	24.9	33.34
7.0	37.3	34.9	31.9	29.6	28.4	26.9	25.4	25.9	29.2	30.3	31.3	32.2	32.4	32.5	31.89
8.6	37.3	37.1	37.1	37.1	36.8	39.1	36.1	35.1	—	—	—	—	—	—	33.72
1.8	31.7	32.0	32.1	32.4	32.4	32.2	32.3	32.6	33.2	33.1	33.0	33.2	33.5	33.7	31.75
1.6	40.4	39.8	39.7	37.1	36.3	36.3	34.6	34.3	33.2	32.5	32.1	31.4	31.1	30.7	35.99
8.7	37.9	36.7	35.0	33.1	32.8	32.2	32.6	30.7	30.7	31.2	32.9	34.1	34.1	33.7	33.51
2.4	41.6	40.1	39.0	37.6	36.9	36.4	36.0	35.0	33.8	31.7	33.7	33.5	32.4	32.0	37.85
6.7	31.8	31.3	32.2	32.0	32.2	31.4	30.1	29.2	28.0	27.1	25.9	24.6	23.9	19.7	31.09
5.5	25.5	26.3	24.5	24.9	23.6	22.3	22.0	22.3	—	—	—	—	—	—	25.26
8.5	36.9	35.0	31.8	30.8	29.2	28.0	26.9	26.7	26.2	25.7	25.5	25.5	25.1	24.7	33.12
5.7	24.8	24.5	22.2	22.1	22.6	22.2	21.3	21.0	21.0	20.8	20.4	18.4	17.8	16.2	23.27
7.0	27.0	26.1	23.8	21.7	20.2	17.5	14.1	13.2	15.2	13.0	13.0	10.3	8.4	8.8	18.56
1.89	31.53	30.76	28.97	27.67	26.87	25.80	24.74	24.06	24.33	23.77	23.44	22.85	22.51	21.75	26.65
1.3	32.8	31.7	31.0	29.9	29.6	30.1	30.8	31.2	—	—	—	—	—	—	28.68
1.2	39.9	39.6	38.7	35.9	33.1	31.7	30.7	30.2	33.0	29.6	29.0	31.3	29.6	28.0	36.51
0.8	40.1	38.4	36.9	35.8	35.9	36.1	36.1	37.3	37.3	37.9	37.7	36.6	37.4	38.1	38.25
8.4	49.1	50.1	48.4	46.3	44.7	44.0	42.1	41.6	41.2	41.0	40.4	40.4	40.1	39.8	43.59
5.6	55.5	55.2	48.3	44.2	40.8	40.1	38.0	36.6	38.3	37.8	38.1	39.2	40.3	41.4	44.57
5.8	59.9	59.9	46.6	44.5	43.2	41.6	41.2	40.7	39.0	38.1	36.3	35.4	34.9	34.7	45.44
3.3	45.7	43.6	41.5	39.2	38.7	38.3	37.0	36.9	37.1	37.7	37.5	37.5	39.6	38.7	39.98
4.3	44.5	40.7	41.6	39.0	38.6	37.8	36.6	35.8	—	—	—	—	—	—	41.07
2.4	46.9	45.5	43.0	40.3	38.3	37.2	36.4	35.3	35.1	35.0	33.8	31.1	29.6	27.8	40.19
5.7	45.7	44.6	42.1	39.1	37.9	36.9	36.1	34.9	34.5	34.7	36.3	34.9	34.0	32.0	39.65
5.5	43.4	41.5	40.3	39.7	39.3	39.2	35.8	33.3	33.7	33.3	32.9	32.8	31.8	31.7	38.92
8.9	37.1	37.7	34.9	35.1	31.4	29.7	29.1	28.0	28.2	27.5	27.5	25.9	25.1	24.2	32.18
6.0	37.0	36.9	36.9	36.2	35.0	34.8	31.0	33.6	33.1	32.2	32.6	32.2	33.3	33.5	4.95
3.0	33.4	32.0	31.0	28.0	26.4	25.4	23.7	23.1	—	—	—	—	—	—	30.53
2.4	45.9	45.4	41.9	37.7	39.7	38.9	37.1	36.3	34.9	32.3	30.5	29.7	29.7	32.0	37.13
3.6	45.0	43.2	43.1	43.2	43.2	43.9	44.4	43.8	44.8	44.0	43.6	43.7	44.6	44.6	42.76
3.4	65.0	62.7	39.8	58.5	60.5	59.7	59.5	58.1	55.6	52.0	53.8	55.6	54.4	52.2	55.50
5.5	45.3	45.3	44.7	44.4	43.2	41.1	40.8	40.5	39.7	37.1	36.9	36.7	36.3	35.9	44.03
8.9	42.8	43.2	41.5	35.7	34.8	33.7	32.6	32.0	30.5	29.7	30.0	29.7	29.8	30.1	36.51
7.7	45.5	45.4	44.6	40.2	37.7	34.8	34.2	33.8	—	—	—	—	—	—	41.15
5.5	58.5	58.5	54.2	46.5	45.2	43.8	44.6	45.8	46.6	46.5	46.1	46.3	45.0	42.5	50.75
7.8	42.6	41.1	39.1	35.7	33.5	32.3	30.9	28.7	28.6	28.7	36.6	26.2	25.1	24.2	36.59
6	37.1	37.3	37.1	35.5	34.8	34.3	34.5	34.8	34.3	34.3	34.3	34.5	34.5	34.5	36.65
1.1	41.5	39.7	38.8	37.7	36.9	35.5	35.5	36.1	37.1	40.5	40.7	39.3	38.3	37.1	38.20
7	44.5	41.9	40.8	39.8	38.4	36.6	35.7	33.5	33.5	32.0	30.7	29.1	27.8	29.2	38.19
3.37	41.91	43.92	41.87	39.52	38.43	37.50	36.70	36.08	36.76	36.25	35.87	35.60	35.21	34.97	39.69

STANDARD THERMOMETER.												
Hours of Mean Gottengen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	38°8	44°1	48°1	49°8	52°7	53°7	55°6	54°7	52°5	53°0	52°6
	5	36°9	46°6	51°5	53°3	57°0	59°0	59°2	61°7	61°5	61°1	60°6
	6	40°5	46°8	51°8	54°9	57°3	60°2	63°5	62°8	61°3	59°6	57°7
	7	41°6	50°5	53°6	56°5	57°8	59°0	59°6	61°4	62°4	58°0	59°2
	8	48°1	49°6	52°5	57°0	56°4	55°7	56°3	57°2	62°4	64°7	61°6
	9	—	—	—	—	—	—	—	—	—	—	—
	10	48°8	52°9	55°9	58°0	59°8	59°8	59°4	59°7	61°7	61°5	61°6
	11	52°5	52°5	53°7	59°8	63°1	64°1	64°7	64°0	63°4	63°6	59°8
	12	54°2	55°4	60°2	61°4	63°4	65°3	66°2	66°4	64°9	61°6	62°2
	13	54°7	58°0	60°0	60°0	60°8	60°4	60°8	63°2	63°2	63°8	64°5
	14	53°1	58°5	59°5	60°4	59°4	59°0	57°6	56°6	56°8	58°1	60°6
	15	47°6	56°1	69°9	63°8	64°4	66°2	67°2	66°8	68°3	69°6	67°4
	16	—	—	—	—	—	—	—	—	—	—	—
	17	46°0	52°5	58°8	61°0	63°7	61°4	63°3	64°7	64°9	65°3	65°8
	18	47°1	53°7	58°5	62°3	64°6	67°1	69°2	69°8	66°7	67°6	67°4
	19	50°4	54°1	58°5	61°2	64°9	63°0	63°2	65°7	66°0	65°7	65°3
	20	49°6	52°9	56°3	60°5	62°1	62°3	63°0	62°8	63°0	62°3	61°8
	21	48°3	50°6	50°8	53°5	52°7	55°4	59°0	62°2	62°8	63°3	60°7
	22	57°2	60°4	58°8	61°3	64°9	68°8	68°4	64°5	67°0	67°0	61°6
	23	—	—	—	—	—	—	—	—	—	—	—
	24	55°8	57°2	58°0	57°3	58°0	58°8	59°7	61°9	63°1	63°1	64°8
	25	50°5	53°7	57°7	61°1	61°8	62°9	63°2	65°5	66°3	63°0	58°9
	26	39°6	41°7	44°7	46°9	49°1	52°1	52°2	52°9	53°9	56°4	58°1
	27	45°3	50°9	54°2	54°7	56°9	58°7	57°6	56°0	58°3	58°5	58°9
	28	54°1	54°0	56°2	56°9	64°0	68°0	71°9	72°4	72°4	68°8	67°8
	29	57°5	55°7	56°8	62°9	60°9	61°5	59°3	58°3	62°1	64°6	60°7
	30	—	—	—	—	—	—	—	—	—	—	—
	31	48°5	47°7	47°6	47°0	45°9	45°2	44°5	44°2	44°2	44°2	44°4
Hourly Means	48°61	52°34	55°19	57°56	59°23	60°32	61°03	61°48	62°05	61°85	61°25	60°64
JUNE.	1	45°9	45°9	48°2	52°8	55°6	60°7	62°3	60°9	60°5	56°0	58°6
	2	52°6	53°0	54°6	56°2	58°9	60°5	62°9	61°9	59°9	59°9	60°3
	3	48°7	55°6	56°5	56°5	57°6	59°5	62°4	61°6	58°6	59°4	58°3
	4	54°7	56°0	58°7	57°7	58°9	61°3	62°7	59°7	59°3	58°1	55°0
	5	41°9	44°8	49°1	50°4	53°8	57°1	59°9	59°5	59°9	62°0	64°0
	6	—	—	—	—	—	—	—	—	—	—	—
	7	50°8	53°0	62°1	61°7	65°3	66°9	67°7	70°1	70°8	70°3	67°5
	8	55°2	55°6	55°7	57°1	59°9	58°9	58°2	58°7	61°5	62°1	60°6
	9	56°3	58°4	62°2	66°0	66°7	68°5	69°1	72°7	74°1	74°1	75°5
	10	63°2	63°7	64°8	63°7	63°1	63°1	63°6	63°7	63°9	64°8	62°7
	11	58°0	61°3	65°0	66°7	65°3	67°0	62°7	65°1	61°2	59°4	58°5
	12	49°1	52°8	57°7	59°9	60°5	60°7	62°3	64°6	65°2	65°7	66°9
	13	—	—	—	—	—	—	—	—	—	—	—
	14	55°0	55°0	51°8	50°4	49°7	50°0	48°2	44°6	44°6	48°5	48°6
	15	39°8	41°3	42°9	44°6	46°3	47°6	48°7	52°0	55°7	57°9	58°9
	16	46°9	49°1	51°8	57°5	55°2	56°0	56°1	54°8	55°0	56°3	57°1
	17	48°5	53°0	57°5	59°7	60°3	60°9	62°3	61°5	63°5	65°0	68°2
	18	52°6	58°3	58°3	60°9	61°7	64°8	65°8	65°6	64°9	64°2	62°4
	19	56°0	56°2	57°9	59°7	62°1	62°1	61°3	62°6	60°5	61°5	65°6
	20	—	—	—	—	—	—	—	—	—	—	—
	21	55°6	59°5	63°1	63°9	65°2	65°2	67°0	67°3	59°4	63°0	66°3
	22	53°3	54°8	53°4	59°7	62°1	65°7	67°0	68°7	68°5	62°9	60°3
	23	57°1	61°7	64°8	67°7	67°8	69°9	69°6	70°1	70°1	71°4	70°7
	24	57°4	64°1	66°7	69°1	71°7	72°7	72°3	72°3	73°4	73°7	74°1
	25	60°3	65°3	63°5	66°9	69°2	71°1	71°5	73°5	73°9	75°3	72°9
	26	63°7	68°2	72°9	74°9	75°2	78°2	75°8	76°5	74°5	76°5	74°3
	27	—	—	—	—	—	—	—	—	—	—	—
	28	62°1	62°7	63°1	66°8	68°1	67°7	69°9	73°1	74°1	75°2	74°3
	29	59°3	60°8	62°5	64°7	66°6	68°8	70°4	70°8	72°7	68°1	68°3
	30	58°9	63°0	68°8	70°9	71°5	69°7	72°0	72°1	72°4	70°9	70°8
Hourly Means	53°96	56°73	58°98	60°97	62°24	63°64	64°30	64°77	64°54	64°70	64°64	63°76

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53°0	52°6	51°8	49°8	48°0	46°8	44°9	42°4	38°3	38°5	43°4	42°6	39°1	35°1	33°4	46°24
61°1	60°6	—	53°0	50°1	48°3	45°6	42°4	40°6	39°8	37°2	36°7	36°7	36°0	35°9	48°29
59°6	57°7	57°3	54°8	49°7	47°4	45°9	46°1	43°9	43°2	42°2	40°4	39°6	39°2	38°0	50°17
58°0	59°2	60°4	59°4	56°2	55°9	50°6	49°2	53°3	54°7	55°2	56°0	57°5	57°3	59°8	56°05
64°7	64°6	60°7	58°6	57°2	57°6	57°3	57°4	56°3	—	—	—	—	—	—	55°35
—	—	—	—	—	—	—	—	—	48°5	48°3	51°3	51°8	50°2	48°6	56°11
61°5	61°6	59°5	56°3	55°7	54°4	53°5	52°8	54°7	54°6	54°3	53°3	51°9	53°1	53°5	57°27
63°6	59°8	58°9	57°7	54°1	53°7	53°5	55°1	56°0	54°2	53°4	53°1	54°3	55°6	54°3	60°05
61°6	62°2	61°2	60°0	61°0	61°0	60°5	59°8	60°0	57°3	58°1	57°7	55°7	53°5	54°3	57°15
63°8	64°5	64°1	64°0	59°6	57°7	53°8	52°0	52°1	51°1	50°0	50°4	49°7	49°5	48°3	53°40
58°1	60°6	61°8	57°0	56°6	53°8	52°5	49°6	49°8	45°6	44°1	43°4	42°7	42°9	42°3	57°88
69°6	67°4	65°3	65°0	59°5	54°7	52°4	51°8	51°4	—	—	—	—	—	—	57°66
—	—	—	63°4	61°7	61°2	59°3	56°2	52°3	55°2	54°5	50°8	46°3	45°3	45°1	58°46
65°3	65°8	65°1	65°2	59°7	56°7	51°2	53°4	52°0	51°8	50°9	50°0	49°8	49°8	48°3	59°28
67°6	67°4	67°2	65°3	63°7	60°3	59°2	58°7	56°4	55°8	51°1	52°9	51°6	50°1	50°8	33°97
65°7	65°3	65°7	57°4	54°7	53°6	50°6	49°4	47°7	46°5	45°9	43°7	43°3	42°9	44°6	54°69
62°3	61°8	58°4	59°3	55°2	54°8	49°2	48°1	51°5	51°3	53°4	51°8	52°4	53°2	54°3	59°62
63°3	60°7	58°8	60°5	60°0	59°3	59°3	57°5	56°3	—	—	—	—	—	—	56°80
67°0	64°6	61°4	61°5	59°7	59°1	56°2	55°8	53°5	52°6	49°7	49°2	48°7	47°3	48°4	54°53
—	—	—	59°9	59°6	57°9	55°9	56°9	46°8	45°2	43°1	41°3	40°0	39°6	38°3	46°64
63°1	64°8	63°7	54°9	48°1	47°1	45°1	43°9	41°7	40°0	39°6	40°2	40°0	36°8	37°5	52°04
63°0	58°9	60°1	59°2	55°3	51°9	49°8	48°6	46°9	46°3	45°2	43°2	42°8	44°6	45°8	62°75
56°4	58°1	56°9	66°9	63°1	60°3	61°1	63°7	62°7	61°1	60°9	57°2	58°5	57°5	56°6	57°07
64°6	60°7	65°7	61°5	58°5	55°7	56°3	56°0	56°0	—	—	—	—	—	—	46°04
44°2	44°4	41°4	44°8	44°8	45°0	45°9	46°1	46°8	47°2	47°0	47°0	47°3	47°6	47°3	54°91
61°85	61°25	60°04	58°98	56°23	54°80	53°16	52°14	51°09	49°93	49°38	48°49	47°79	47°19	47°23	54°91
56°0	58°6	57°7	57°3	56°3	54°5	51°0	54°3	53°4	52°4	51°0	50°4	49°7	51°3	52°0	54°24
59°9	60°3	61°5	60°4	57°0	54°7	53°0	52°4	48°9	48°2	46°7	45°3	45°2	44°1	44°9	51°29
59°4	58°3	56°2	56°5	56°2	55°0	51°4	52°4	52°4	53°2	53°4	53°8	54°0	53°8	53°7	55°82
58°1	55°0	53°8	53°6	52°8	50°6	47°3	46°1	45°0	43°0	42°1	39°8	37°9	37°2	36°7	51°17
62°0	64°0	63°6	61°1	60°3	55°6	53°0	48°4	45°6	—	—	—	—	—	—	52°83
—	—	—	60°4	58°0	56°3	56°0	55°4	55°4	54°4	54°4	53°2	53°2	53°1	53°6	59°96
70°3	67°5	64°7	57°2	57°1	56°7	57°7	57°7	56°5	55°4	55°6	56°2	54°0	53°4	53°5	57°19
62°1	60°6	58°1	72°7	72°9	69°5	65°0	65°3	67°3	65°5	63°3	62°4	62°4	61°0	60°8	66°84
74°1	75°5	72°5	61°9	61°7	60°3	60°5	59°3	58°6	59°6	61°1	60°3	60°3	57°7	57°1	61°73
61°8	62°7	62°9	55°0	51°4	51°2	51°0	50°7	50°9	50°8	51°0	50°6	49°0	47°9	46°9	56°41
59°4	58°5	57°3	65°4	61°7	56°5	55°8	55°2	54°4	—	—	—	—	—	—	57°96
65°7	66°9	66°3	18°0	47°1	44°6	43°2	42°3	41°7	41°3	41°0	41°3	41°3	40°1	39°6	46°13
—	—	—	57°3	55°2	52°1	49°5	47°5	46°8	47°7	47°3	46°0	45°5	44°8	45°2	49°11
48°5	48°6	49°1	55°6	55°8	55°8	47°1	45°7	45°7	44°9	45°1	44°2	43°9	41°7	42°6	50°69
57°9	58°9	58°2	66°2	61°4	54°8	50°6	47°6	47°1	45°6	44°1	43°6	43°0	46°1	48°1	55°28
56°3	57°1	56°7	57°8	57°0	57°5	58°3	58°1	58°5	58°3	56°7	56°7	56°9	56°7	56°7	59°50
65°0	68°2	67°7	—	—	—	—	—	—	—	—	—	—	—	—	57°65
64°2	62°4	59°5	66°5	57°9	55°8	53°1	51°6	51°0	—	—	—	—	—	—	59°44
61°5	56°6	67°1	—	—	—	—	—	—	53°4	52°0	52°8	52°4	52°4	51°7	58°91
—	—	—	66°0	60°1	57°5	56°9	56°3	56°3	54°9	53°2	51°6	49°7	49°5	52°0	62°39
63°0	66°3	67°1	63°2	60°4	57°7	56°6	56°7	55°4	55°7	55°7	55°4	55°0	50°4	52°0	61°86
62°9	60°3	63°3	67°5	64°4	61°4	59°1	58°3	58°1	55°8	55°8	53°2	52°8	51°4	51°4	65°62
71°4	70°7	67°6	73°9	69°7	68°3	60°5	58°5	57°5	55°8	54°4	53°4	53°8	53°0	55°5	70°19
73°7	74°1	74°9	68°3	63°7	62°1	61°5	60°7	60°1	61°3	61°9	61°5	61°5	60°9	59°3	65°80
75°3	72°9	68°7	71°6	68°7	67°7	69°3	65°9	64°4	—	—	—	—	—	—	63°40
76°5	74°3	74°7	—	—	—	—	—	—	68°4	67°6	65°8	64°1	63°7	61°9	62°76
—	—	—	69°2	66°9	66°1	64°8	61°5	63°6	62°0	61°3	60°3	59°5	55°7	57°5	58°47
75°2	74°3	70°7	70°5	67°4	63°7	61°9	60°3	59°5	57°9	56°5	56°7	55°4	54°8	55°6	63°40
68°1	68°3	68°3	68°1	64°4	61°1	57°7	56°5	56°7	55°4	52°8	50°8	50°1	50°1	52°0	68°76
70°9	70°8	69°6	64°70	64°64	63°76	62°74	60°20	57°93	56°07	54°91	54°27	54°01	53°33	52°41	51°80
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50°96
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51°36
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	58°47

STANDARD THERMOMETER.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.	1	56.7	61.1	65.1	69.9	73.1	72.7	74.5	74.8	76.1	75.4	75.7
	2	57.1	63.8	70.1	76.2	75.3	74.5	76.5	78.7	78.2	78.9	79.3
	3	61.5	67.9	73.5	76.5	78.5	80.4	81.7	81.8	81.6	81.2	81.5
	4	—	—	—	—	—	—	—	—	—	—	—
	5	62.0	67.6	72.2	77.9	80.1	79.6	80.1	81.3	81.8	80.9	78.2
	6	67.1	67.7	67.2	69.7	71.2	73.5	75.9	78.7	77.1	76.6	78.7
	7	65.2	67.8	69.1	76.1	76.9	78.2	80.3	80.3	81.3	81.1	81.3
	8	67.7	71.1	76.3	79.0	79.7	80.7	80.3	80.3	77.6	78.0	77.6
	9	68.0	72.5	75.9	78.0	78.7	81.5	81.2	81.2	79.6	79.6	77.2
	10	69.3	69.9	71.8	74.1	74.9	76.3	76.7	79.5	81.7	80.6	80.5
	11	—	—	—	—	—	—	—	—	—	—	—
	12	68.9	74.7	76.3	76.8	78.0	79.7	79.5	79.8	81.7	82.1	83.2
	13	72.5	75.5	76.8	79.7	81.5	83.3	83.6	83.1	79.7	77.8	77.1
	14	57.5	61.5	63.3	69.3	70.7	73.3	73.9	74.0	72.7	71.5	70.7
	15	54.6	58.7	63.7	68.8	71.4	73.3	75.4	76.5	76.7	76.7	75.4
	16	65.2	70.6	74.0	77.1	79.4	81.1	82.5	83.3	81.7	82.1	80.0
	17	70.0	71.4	74.3	78.2	82.7	83.5	84.7	83.7	84.3	75.3	76.8
	18	—	—	—	—	—	—	—	—	—	—	—
	19	71.6	77.4	80.0	80.1	82.9	85.1	87.0	85.1	82.1	85.1	86.1
	20	71.2	75.7	79.1	77.8	79.7	77.4	79.5	77.6	77.8	80.7	76.3
	21	69.1	72.0	71.7	73.2	76.5	79.7	79.7	79.4	81.5	79.1	80.3
	22	69.7	72.0	71.7	72.9	74.7	75.7	77.8	78.2	79.3	78.9	78.2
	23	53.6	59.3	64.9	69.1	69.9	70.7	71.3	71.4	70.3	72.7	74.5
	24	58.7	62.8	67.1	69.3	67.9	67.5	67.1	66.1	68.7	69.9	69.5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	57.8	56.3	55.8	56.0	55.2	56.2	56.3	59.1	62.1	61.7	62.7
	27	51.2	55.0	58.1	61.5	61.7	63.1	64.1	63.5	63.5	63.3	65.0
	28	50.8	56.9	62.3	64.6	65.3	65.3	64.1	65.7	65.2	65.2	65.5
	29	57.7	62.1	64.8	66.8	68.6	70.4	70.7	70.0	68.9	69.0	68.1
	30	55.9	59.5	60.3	60.1	66.3	63.9	65.2	62.1	63.5	65.3	66.1
	31	51.4	60.1	64.6	66.1	68.5	68.1	71.5	67.0	68.1	68.7	70.5
August 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	62.30	66.33	69.33	72.03	74.12	74.62	75.60	75.64	74.92	75.46	75.44	74.95
AUGUST.	2	52.2	59.1	65.2	66.0	69.5	71.0	71.5	72.5	70.8	72.5	72.3
	3	55.4	61.9	65.9	69.8	70.3	70.5	70.7	71.1	70.6	72.1	73.2
	4	59.4	65.6	70.1	70.5	70.9	73.0	73.9	74.2	75.7	75.9	76.9
	5	59.9	65.4	69.2	70.9	71.5	72.7	72.9	73.1	74.7	74.5	73.1
	6	63.1	65.7	71.5	74.3	77.8	77.6	77.7	76.5	78.5	76.7	75.1
	7	59.5	60.1	64.6	67.1	68.9	72.7	73.1	73.1	71.2	71.3	70.2
	8	—	—	—	—	—	—	—	—	—	—	—
	9	63.1	63.5	64.1	66.2	66.9	68.9	71.1	73.2	73.4	74.6	73.7
	10	64.7	66.3	67.9	71.6	74.9	76.2	76.4	76.5	77.8	76.0	75.1
	11	66.1	67.4	69.7	68.2	68.9	70.1	72.1	73.3	71.1	67.3	69.1
	12	57.7	59.3	63.9	69.1	73.5	74.8	75.3	74.8	75.5	75.1	72.3
	13	63.5	66.9	78.1	78.1	74.9	74.5	75.5	75.3	77.2	74.3	74.2
	14	66.3	69.1	71.6	74.3	77.4	77.2	77.8	79.6	75.7	78.9	76.4
	15	—	—	—	—	—	—	—	—	—	—	—
	16	68.0	71.2	73.8	76.7	78.2	80.2	79.8	80.5	82.1	82.5	81.9
	17	64.8	72.6	73.7	74.9	75.9	72.5	72.7	71.1	73.9	71.3	70.3
	18	56.3	57.3	59.1	61.5	63.1	63.7	65.7	66.3	67.3	67.7	64.9
	19	46.0	50.1	55.4	57.7	61.3	61.5	63.0	64.1	64.4	66.3	65.2
	20	54.2	59.1	61.3	66.0	68.7	67.1	70.5	70.7	70.5	72.9	69.1
	21	54.9	57.2	59.8	64.4	66.8	68.5	70.5	71.5	73.0	73.5	73.9
	22	—	—	—	—	—	—	—	—	—	—	—
	23	53.5	59.0	63.5	65.2	63.5	64.4	66.1	66.5	67.5	68.3	68.1
	24	52.8	57.3	60.5	64.4	67.0	69.3	70.5	70.0	70.4	70.4	70.6
	25	53.8	57.1	65.5	68.7	70.3	69.7	70.5	69.9	70.7	71.1	69.5
	26	53.4	58.3	63.1	67.2	68.7	71.7	71.2	73.9	74.0	74.7	74.8
	27	56.2	56.8	58.9	60.3	61.7	63.6	64.9	66.0	65.3	63.9	64.6
	28	47.5	54.0	62.0	63.8	66.1	67.8	68.1	68.3	69.0	68.1	68.7
	29	—	—	—	—	—	—	—	—	—	—	—
	30	58.7	64.5	65.8	69.6	71.5	72.7	73.0	73.3	72.5	70.7	68.4
	31	50.6	54.1	56.5	57.5	58.7	59.6	60.7	61.7	61.7	62.7	61.6
Hourly Means	57.75	61.50	65.41	67.85	69.50	70.44	71.35	71.81	72.10	72.05	71.26	70.23

STANDARD THERMOMETER.

9	10	11
3	4	5
75.4	75.7	74.9
78.9	79.3	79.0
81.2	81.5	79.7
—	—	—
80.9	78.2	70.5
76.6	78.7	75.2
81.1	81.3	79.9
78.0	77.6	77.9
79.6	77.2	77.0
80.6	80.5	77.5
—	—	—
82.1	83.2	79.4
77.8	77.1	74.3
71.5	70.7	70.2
76.7	75.4	73.0
82.1	80.0	77.8
75.3	76.8	78.2
—	—	—
85.1	86.1	85.5
80.7	76.3	70.7
79.1	80.3	78.2
78.9	78.2	78.9
72.7	74.5	73.3
69.9	69.5	69.2
—	—	—
61.7	62.7	63.2
63.3	65.0	64.8
65.2	65.5	65.0
69.0	69.4	68.1
65.3	66.1	66.5
68.7	70.5	67.1
—	—	—
75.46	75.44	74.96
—	—	—
72.5	72.3	69.5
72.1	73.2	74.1
75.9	76.9	76.3
71.5	73.1	71.5
76.7	75.1	70.3
71.3	70.2	68.9
—	—	—
74.6	73.7	73.3
76.0	75.1	74.3
67.3	69.1	69.9
75.1	72.3	73.9
74.3	74.2	73.5
78.9	76.4	77.0
—	—	—
82.5	81.9	83.1
71.3	70.3	71.1
67.7	64.9	60.7
66.3	65.2	65.1
72.9	69.1	60.7
73.5	73.5	73.9
—	—	—
68.3	68.1	67.8
70.4	70.6	70.6
71.1	69.5	68.4
74.7	74.8	70.9
63.9	64.6	65.5
68.1	68.3	68.7
—	—	—
70.7	68.1	66.4
62.7	61.6	60.1
—	—	—
72.05	71.26	70.24

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
74.7	69.5	63.7	60.7	59.1	59.8	60.1	58.6	59.6	58.1	55.9	54.0	65.99
74.7	70.9	66.7	64.6	63.9	62.0	59.0	58.3	56.9	56.3	55.1	55.2	68.04
78.3	72.5	66.9	62.8	60.1	60.0	—	—	—	—	—	—	69.87
—	—	—	—	—	—	60.3	59.7	59.1	57.5	57.1	56.7	—
71.0	70.5	68.3	67.8	67.3	68.9	68.9	66.9	67.9	67.3	67.3	66.9	72.13
72.2	71.1	67.2	65.1	63.7	63.5	64.4	62.8	61.5	63.1	62.9	63.5	69.15
71.8	73.7	68.9	66.5	65.4	65.7	66.5	65.3	62.3	61.8	63.0	63.0	71.56
77.7	75.5	71.7	69.6	70.5	69.9	69.9	69.3	65.7	66.4	65.8	66.1	73.64
76.3	74.1	71.5	71.9	70.5	70.3	70.1	69.3	69.5	68.7	68.7	68.7	74.17
76.1	73.3	73.3	72.2	72.2	71.3	—	—	—	—	—	—	72.77
—	—	—	—	—	—	67.3	66.7	65.5	65.5	65.3	65.0	—
80.7	79.5	73.5	70.3	69.1	68.7	69.5	68.8	65.9	63.5	65.5	70.3	74.39
72.1	69.1	66.3	63.9	62.3	60.7	60.0	59.3	58.7	57.8	56.7	56.2	70.33
69.1	64.1	60.3	57.5	56.6	55.3	53.1	52.5	51.8	51.2	52.3	51.8	62.76
70.9	69.5	68.5	68.3	68.3	66.5	66.1	60.7	61.3	60.3	59.5	59.1	67.63
75.3	75.1	71.3	69.3	68.7	68.1	68.5	68.1	67.9	66.5	65.7	67.1	73.60
78.0	77.4	74.3	73.1	73.5	73.1	—	—	—	—	—	—	—
—	—	—	—	—	—	70.2	68.7	69.1	67.5	66.9	66.7	75.07
81.3	79.4	75.2	72.9	71.5	70.9	70.3	68.1	68.3	68.7	68.3	68.0	77.25
72.3	71.7	70.8	70.3	70.6	70.0	70.0	69.3	68.5	69.5	68.4	68.5	73.73
75.1	73.3	70.9	68.9	67.7	65.7	67.3	66.3	65.8	66.7	68.7	68.5	72.72
76.2	71.1	67.2	62.9	60.7	58.3	54.8	52.8	52.0	51.0	48.7	48.3	67.14
73.3	68.3	63.3	59.5	57.7	57.3	55.9	55.8	55.4	54.4	53.6	53.8	63.72
67.5	66.3	65.1	65.5	66.1	66.3	—	—	—	—	—	—	66.29
—	—	—	—	—	—	65.6	68.4	69.5	67.7	61.5	59.2	—
60.3	58.3	54.9	52.6	48.7	47.5	47.3	47.1	46.7	46.3	43.8	47.1	54.29
61.4	60.4	54.7	51.8	51.2	48.9	48.1	48.5	46.9	46.5	45.3	45.5	56.13
62.5	60.9	57.7	54.0	53.2	52.2	52.2	52.6	52.6	51.3	49.5	48.7	58.47
68.1	67.0	67.0	63.7	62.9	61.9	60.7	59.5	58.9	55.8	55.3	54.9	64.25
65.5	60.1	60.1	59.4	57.9	57.1	55.8	53.1	52.8	50.1	48.7	48.3	59.42
63.7	60.1	61.3	58.1	56.2	54.5	—	—	—	—	—	—	61.03
—	—	—	—	—	—	56.0	55.4	54.4	52.0	51.2	50.1	—
72.59	69.81	66.69	64.56	63.54	62.80	62.14	61.18	60.63	59.69	58.91	58.93	67.98
—	—	—	—	—	—	—	—	—	—	—	—	—
72.3	67.3	61.9	60.7	60.3	58.1	57.1	53.2	52.6	52.8	49.7	48.5	62.78
73.7	69.7	62.4	58.1	55.1	54.4	55.1	54.2	52.8	52.4	51.4	52.0	63.20
75.1	71.7	64.0	59.9	58.6	57.9	58.1	56.5	56.2	56.5	55.9	56.9	66.24
69.1	67.1	64.8	63.1	64.1	63.3	63.3	63.6	62.7	62.4	61.8	60.9	67.32
63.9	64.7	67.0	66.7	67.0	66.9	66.8	65.8	64.4	61.1	58.7	57.5	68.97
67.5	64.6	63.3	62.3	62.3	61.7	—	—	—	—	—	—	65.65
—	—	—	—	—	—	62.3	62.3	62.3	62.1	61.7	62.5	—
72.3	70.0	68.3	68.5	68.3	66.7	65.1	64.4	63.3	62.5	62.7	63.7	67.83
70.5	69.7	69.1	68.5	67.9	67.7	67.3	65.4	65.3	65.0	65.5	66.1	70.24
70.9	66.7	64.6	62.1	61.1	60.6	59.7	59.3	59.0	59.5	57.8	57.3	65.49
72.3	68.7	67.9	66.9	66.8	66.5	66.3	66.1	65.3	62.5	62.7	62.3	68.31
72.7	70.5	69.3	69.1	67.3	66.9	66.1	68.1	67.3	67.0	66.3	66.5	70.96
75.0	73.7	70.3	68.7	67.5	67.0	—	—	—	—	—	—	71.33
—	—	—	—	—	—	66.1	65.5	65.2	64.0	63.7	64.0	—
80.9	75.7	71.5	69.3	67.1	66.3	65.5	64.8	64.7	64.4	64.6	63.0	73.16
68.9	67.9	66.3	65.7	62.6	61.7	59.6	56.8	55.1	56.4	58.5	56.5	66.70
59.3	56.3	54.6	52.2	51.6	49.6	48.6	48.3	48.3	48.3	48.1	45.0	56.83
64.8	60.3	56.5	55.9	55.7	55.6	56.0	54.2	52.4	50.4	51.4	51.8	57.73
60.1	58.7	58.7	58.3	57.1	55.2	55.4	54.0	54.0	53.4	53.0	53.0	60.90
71.5	66.5	59.5	58.3	57.5	55.4	—	—	—	—	—	—	62.00
—	—	—	—	—	—	54.1	53.0	51.8	51.4	50.6	50.8	—
66.3	60.5	56.9	56.2	54.2	53.1	52.0	52.1	52.8	52.3	49.6	49.3	59.53
69.1	61.7	58.9	57.6	55.1	55.1	55.4	54.4	54.2	52.8	52.6	61.47	—
66.4	62.2	58.5	57.5	56.9	56.3	55.9	55.0	54.1	53.5	53.6	51.9	61.96
69.3	66.1	65.2	65.1	66.5	66.3	64.0	62.9	63.3	61.7	60.3	56.9	66.23
65.5	59.0	58.5	56.5	54.6	53.1	53.2	52.4	49.5	47.3	48.0	48.8	58.09
65.5	60.0	58.7	56.5	56.4	55.0	—	—	—	—	—	—	60.95
—	—	—	—	—	—	59.0	57.5	56.0	55.5	55.6	55.4	—
63.8	62.0	59.4	60.4	59.4	58.1	56.6	56.2	55.4	49.9	49.5	48.5	62.78
58.9	51.7	51.3	49.3	48.5	48.3	47.7	47.5	45.5	48.1	49.1	50.4	54.36
—	—	—	—	—	—	—	—	—	—	—	—	—
68.68	65.23	62.59	61.28	60.37	59.49	59.08	58.22	57.45	56.72	56.25	55.83	64.27

STANDARD THERMOMETER.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	1	51.4	52.8	56.4	59.2	62.3	64.1	63.9	65.9	66.4	66.3	66.0
	2	49.3	55.2	60.9	64.8	67.5	68.7	69.4	70.1	72.1	71.9	72.1
	3	57.4	62.4	64.1	64.2	70.4	73.1	73.7	70.9	74.8	73.5	70.6
	4	56.0	56.1	56.1	56.3	57.1	57.7	57.3	57.8	57.7	58.3	58.5
	5	—	—	—	—	—	—	—	—	—	—	—
	6	49.2	51.8	56.2	62.3	63.3	63.5	63.3	65.3	65.9	67.7	65.8
	7	52.6	59.6	63.7	64.9	65.2	65.3	64.6	65.1	63.0	63.3	63.1
	8	65.0	66.1	68.4	69.6	73.0	74.6	74.8	73.5	73.8	72.9	72.5
	9	50.1	50.1	51.1	52.7	55.8	56.8	58.2	60.5	60.3	60.1	60.2
	10	45.3	49.7	55.8	60.3	61.7	62.2	63.5	63.5	64.0	63.7	63.3
	11	46.8	52.0	56.1	61.5	61.5	63.1	62.2	62.1	61.9	61.6	60.9
	12	—	—	—	—	—	—	—	—	—	—	—
	13	54.6	53.9	53.2	54.8	54.8	54.8	55.0	55.5	53.8	52.2	50.9
	14	45.0	45.7	46.7	47.4	48.7	48.4	49.4	50.0	53.0	53.3	52.9
	15	38.1	42.9	46.3	50.1	52.0	54.2	55.6	57.1	57.0	57.3	57.9
	16	38.1	43.3	50.8	53.4	57.7	58.3	58.7	58.3	59.0	59.5	59.7
	17	50.4	51.4	56.5	60.0	61.5	62.5	62.1	62.0	61.1	61.3	61.0
	18	57.3	58.1	59.4	59.8	61.1	60.7	61.3	61.5	60.5	61.0	61.0
	19	—	—	—	—	—	—	—	—	—	—	—
	20	54.8	55.4	56.3	56.5	57.1	56.8	57.0	57.0	56.7	56.5	56.6
	21	51.4	53.7	56.3	58.3	59.9	60.1	62.5	61.7	62.7	61.7	59.7
	22	44.8	48.3	52.5	56.2	59.2	59.5	59.4	58.7	59.5	59.3	60.1
	23	49.9	52.8	58.7	61.5	62.9	65.0	65.5	66.1	67.3	67.1	66.7
	24	54.6	54.0	54.0	54.4	54.4	54.6	56.0	55.8	55.8	55.6	55.7
	25	49.0	48.9	50.0	53.1	55.1	56.7	59.1	58.1	57.2	56.2	55.5
	26	—	—	—	—	—	—	—	—	—	—	—
	27	58.0	59.2	60.1	60.6	62.3	61.1	66.3	67.5	68.3	68.7	69.1
	28	46.7	49.3	53.0	54.9	57.5	59.5	60.3	52.2	55.0	54.4	52.2
	29	43.6	44.4	48.3	51.4	54.2	50.4	54.2	55.4	48.7	46.6	48.2
	30	39.6	41.9	45.0	48.9	52.8	53.2	54.7	54.8	52.2	52.0	53.0
Hourly Means	49.96	52.27	55.23	57.58	59.58	60.30	61.08	61.02	61.07	60.85	60.51	59.50
OCTOBER.	1	44.4	46.3	48.9	50.0	50.9	52.7	52.8	53.7	52.8	54.0	54.0
	2	39.3	41.9	46.9	51.3	53.5	54.8	54.6	55.0	56.2	56.3	55.0
	3	—	—	—	—	—	—	—	—	—	—	—
	4	40.7	44.0	51.5	56.7	58.1	59.5	60.5	59.4	59.3	58.1	58.0
	5	57.3	58.3	58.8	60.7	59.5	60.1	63.7	63.2	63.9	65.0	62.3
	6	57.3	57.2	57.0	56.9	56.7	56.9	57.5	57.3	58.0	58.7	58.5
	7	55.5	54.8	55.0	55.0	56.2	55.6	55.0	55.5	55.6	55.8	56.0
	8	55.6	55.5	55.7	56.2	57.5	58.5	59.0	56.8	56.7	56.3	56.8
	9	40.8	44.2	47.1	51.9	54.2	53.8	53.6	54.0	56.5	56.5	55.6
	10	—	—	—	—	—	—	—	—	—	—	—
	11	39.4	39.6	41.7	44.4	46.5	47.8	49.5	49.5	50.6	51.0	50.7
	12	41.4	42.4	43.8	45.0	46.7	47.8	45.3	45.3	44.0	44.2	43.9
	13	38.6	39.1	41.3	41.7	43.0	43.9	46.5	47.3	47.1	46.0	44.1
	14	35.0	35.4	35.6	39.1	41.0	40.3	41.0	40.0	40.8	41.0	40.2
	15	29.7	30.6	33.7	35.3	37.6	41.5	41.9	41.6	43.2	42.6	41.7
	16	42.8	44.3	46.1	47.9	49.9	51.2	52.7	54.5	55.4	55.7	54.5
	17	—	—	—	—	—	—	—	—	—	—	—
	18	39.1	42.1	45.3	49.8	54.0	56.3	60.3	61.7	61.5	61.0	60.5
	19	41.9	41.1	44.3	48.5	49.5	51.6	53.6	52.4	54.5	53.5	52.8
	20	29.9	31.9	37.8	44.4	47.3	49.5	49.9	51.4	54.0	54.4	52.8
	21	51.5	55.9	58.1	41.5	44.0	44.9	44.7	44.1	44.0	43.9	44.0
	22	38.1	38.2	38.1	37.9	38.7	39.2	38.9	39.4	40.0	40.4	41.0
	23	35.3	35.1	37.2	41.6	46.0	48.0	49.3	48.9	49.1	49.1	48.9
	24	—	—	—	—	—	—	—	—	—	—	—
	25	46.3	46.3	46.6	48.3	47.9	48.7	48.4	48.2	45.2	42.6	39.6
	26	29.1	30.2	31.8	31.6	31.9	31.3	32.4	31.0	30.9	30.7	29.7
	27	21.9	21.7	23.8	29.0	30.8	32.0	33.7	35.8	36.2	35.7	34.7
	28	25.3	27.0	22.4	35.3	39.4	41.0	41.0	41.0	41.4	40.8	40.4
	29	28.6	32.7	34.5	41.0	45.2	47.3	48.0	49.0	49.2	48.9	48.1
	30	34.1	33.9	36.4	43.7	47.3	50.5	50.4	51.3	50.2	50.1	49.3
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	39.30	40.37	42.67	45.57	47.43	48.64	49.39	49.51	49.86	49.70	49.00	47.14

9	10	11
3	4	5
66°3	66°0	65°4
71°9	72°1	69°5
73°5	70°6	65°5
78°3	58°5	58°9
67°7	65°8	65°1
63°3	63°1	62°7
72°9	72°5	70°8
60°1	60°2	59°0
63°7	65°3	63°0
61°6	60°9	60°3
52°2	50°9	49°2
53°3	52°9	51°8
57°3	57°9	57°9
59°5	59°7	58°3
61°3	61°0	60°0
61°0	61°0	60°1
56°5	56°6	57°1
61°7	59°7	58°3
59°3	60°1	58°7
67°1	66°7	66°0
55°6	55°7	55°3
56°2	55°5	55°5
68°7	69°1	67°1
54°4	52°2	51°5
46°6	48°2	48°5
52°0	53°0	51°6
60°85	60°51	59°20
54°0	54°0	52°2
56°3	55°0	52°8
58°1	58°0	56°9
65°0	62°3	60°7
58°7	58°5	58°7
55°8	56°0	56°0
56°3	56°8	55°9
56°5	56°5	55°6
51°0	50°7	48°1
41°2	43°9	44°0
46°0	44°1	43°4
41°0	40°2	38°9
42°6	41°7	39°8
55°7	54°5	53°2
61°0	60°5	58°7
53°5	52°8	50°1
54°4	52°8	48°5
43°9	44°0	43°4
40°1	41°0	40°6
39°1	38°9	46°1
2°6	39°6	37°3
30°7	29°7	27°5
33°7	31°7	33°5
0°8	40°4	38°6
8°9	48°1	44°6
0°1	49°3	46°3
9°70	49°00	47°14

STANDARD THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
63.9	58.4	56.3	54.9	51.4	53.9	53.1	52.0	51.1	51.4	51.1	48.7	57.93	
68.1	65.2	65.2	64.1	61.7	59.5	58.3	56.7	56.2	54.4	55.6	55.4	63.00	
62.3	60.0	59.1	58.9	58.2	56.3	55.9	55.8	56.7	56.7	56.3	56.2	63.04	
59.3	59.7	60.3	60.6	60.6	59.5	—	49.8	48.7	48.3	48.1	47.7	55.77	
—	—	—	—	—	—	—	—	—	—	—	—	—	
63.6	60.0	57.7	57.2	56.8	55.0	53.0	53.6	52.6	51.9	51.6	51.8	58.59	
61.3	62.2	61.3	63.1	61.1	63.0	63.3	63.9	63.5	63.6	63.9	64.1	62.90	
68.0	66.5	66.1	65.7	58.3	55.2	54.0	54.0	53.6	51.8	49.5	61.7	64.73	
58.9	57.2	56.5	53.2	50.1	48.0	45.7	44.4	44.5	43.9	43.6	43.3	52.68	
60.6	53.7	51.4	50.6	49.5	48.9	48.6	48.4	47.7	46.7	46.3	46.5	54.79	
59.0	52.6	51.0	50.8	50.4	50.1	—	—	—	—	—	—	—	
—	—	—	—	—	—	56.3	55.6	54.6	54.4	54.2	55.4	56.43	
48.1	47.1	46.1	45.5	45.2	44.6	44.6	44.6	44.4	44.4	44.1	44.6	49.42	
51.2	46.1	44.6	43.2	43.6	42.4	41.9	40.1	39.5	38.1	39.1	38.6	45.86	
55.0	49.5	48.3	49.2	48.3	47.1	45.8	43.2	40.9	39.7	38.9	38.5	48.78	
55.3	50.8	49.0	47.8	48.5	49.5	49.5	49.3	49.3	48.7	49.3	50.1	52.18	
58.8	58.7	58.5	58.3	55.8	55.4	54.6	58.3	58.3	58.1	57.5	57.5	58.32	
59.3	60.1	59.8	59.1	58.9	59.3	—	—	—	—	—	—	—	
—	—	—	—	—	—	55.4	55.4	55.2	54.8	54.8	54.8	58.70	
55.6	53.0	53.6	53.2	52.8	52.0	52.0	53.4	53.0	52.3	54.1	52.7	54.81	
55.0	51.6	49.9	49.3	48.4	48.3	46.7	44.6	43.6	44.7	44.9	44.4	53.24	
53.8	51.9	50.1	49.2	50.6	48.9	47.3	46.1	45.9	45.5	45.5	45.7	52.36	
62.5	61.1	59.5	58.1	56.9	56.3	58.3	57.1	56.5	56.0	55.2	54.6	60.07	
51.8	51.4	54.6	55.0	54.1	53.4	53.1	52.8	52.1	50.6	49.5	48.8	53.89	
54.8	51.6	54.1	53.6	53.4	53.1	—	—	—	—	—	—	—	
—	—	—	—	—	—	56.5	57.3	58.1	58.3	58.3	57.9	55.20	
61.6	62.3	62.3	60.9	58.7	56.3	52.8	49.7	48.6	46.7	46.9	46.3	59.48	
49.8	48.7	46.7	44.9	44.8	43.0	42.1	41.7	41.5	43.0	43.4	43.9	49.16	
47.7	47.1	46.2	44.8	44.4	45.3	45.3	43.4	40.4	41.5	38.5	39.6	46.59	
51.0	45.9	45.2	45.2	46.1	47.7	49.1	50.0	49.9	48.7	48.1	45.9	48.85	
57.77	55.02	54.36	53.71	52.87	52.01	51.47	50.77	50.25	49.84	49.62	49.38	55.26	
—	—	—	—	—	—	—	—	—	—	—	—	—	
48.1	43.1	42.4	39.8	40.4	40.8	39.8	37.9	38.5	40.0	39.6	39.6	45.96	
48.3	45.7	45.3	46.6	46.7	44.3	—	—	—	—	—	—	—	
—	—	—	—	—	—	45.6	45.7	44.2	43.8	42.9	42.6	48.30	
56.2	56.2	55.8	55.8	51.0	53.9	54.5	54.4	53.3	54.2	54.2	56.0	55.05	
59.5	59.0	58.5	58.3	57.5	57.1	57.3	57.2	57.3	57.2	57.2	57.1	59.44	
58.5	58.3	57.3	55.9	57.1	56.6	56.6	55.1	55.8	55.6	55.4	55.5	57.10	
56.2	56.5	56.7	55.8	55.8	55.8	56.1	56.2	55.8	55.8	55.8	55.8	55.76	
57.5	57.3	56.6	54.8	51.5	50.1	48.4	47.3	46.3	44.5	42.5	42.1	53.25	
53.1	52.9	51.1	51.4	53.6	53.0	—	—	—	—	—	—	—	
—	—	—	—	—	—	42.3	41.5	40.6	41.0	41.0	40.2	49.70	
46.7	43.1	43.0	41.2	40.1	37.9	37.7	37.7	38.4	38.7	40.0	41.5	45.64	
44.0	43.6	43.2	42.8	42.4	43.0	42.8	41.2	40.3	39.6	39.5	38.6	43.53	
40.3	39.5	37.2	35.3	34.1	32.9	32.2	33.7	34.1	34.7	35.4	35.5	39.45	
36.1	34.1	31.6	30.3	29.0	28.8	27.5	27.4	27.7	28.6	29.0	29.0	34.43	
30.3	41.5	40.9	40.3	41.8	42.8	42.8	42.1	41.1	41.3	41.3	43.4	40.31	
53.8	53.2	52.6	52.2	52.0	51.8	—	—	—	—	—	—	—	
—	—	—	—	—	—	40.6	39.1	39.1	38.2	37.6	37.4	48.16	
50.1	57.2	56.3	57.9	51.0	52.2	51.2	50.1	48.9	47.1	43.4	42.2	52.91	
46.1	44.8	43.8	40.8	38.9	34.3	33.5	32.1	31.1	30.9	31.0	30.8	43.00	
47.3	44.4	43.0	40.6	39.9	36.6	32.9	31.4	30.6	31.2	31.0	33.9	41.32	
43.2	43.2	42.6	42.5	42.5	39.8	39.0	38.7	38.3	38.3	38.1	38.3	41.15	
40.3	39.9	39.8	39.5	38.9	39.1	39.3	37.5	35.2	34.3	34.8	36.5	38.57	
45.3	40.2	40.2	38.6	38.3	38.9	—	—	—	—	—	—	—	
—	—	—	—	—	—	46.7	46.7	46.7	46.5	46.5	46.3	43.98	
35.3	34.5	34.5	32.2	32.2	31.8	31.2	31.0	30.8	30.3	28.8	28.2	38.59	
26.5	25.7	24.6	23.8	22.7	21.7	21.1	20.2	20.6	20.6	20.9	20.8	26.57	
31.7	32.0	31.6	31.5	31.8	28.8	28.2	27.8	27.6	28.2	28.0	27.1	30.96	
37.9	37.0	35.7	31.1	29.9	29.5	29.5	30.0	28.8	28.8	28.3	29.0	34.13	
43.4	41.5	41.1	37.4	38.5	35.0	34.6	33.9	33.1	32.9	33.1	33.3	39.79	
49.8	45.2	44.1	38.7	36.6	35.9	—	—	—	—	—	—	—	
—	—	—	—	—	—	48.9	48.8	47.7	48.1	47.7	47.8	44.75	
45.98	44.93	44.20	45.27	42.33	41.25	40.77	40.23	39.82	39.75	39.46	39.56	44.27	

STANDARD THERMOMETER.												
Hours of Mean Stationing Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	1	47.7	48.2	49.4	50.6	52.6	53.6	55.2	55.2	54.4	53.2	51.9
	2	49.7	49.7	50.8	52.3	54.0	55.8	56.3	58.2	56.1	55.8	54.8
	3	46.0	46.2	53.4	54.0	53.2	53.0	54.4	54.3	54.8	51.0	53.8
	4	41.9	41.5	45.1	48.9	49.3	51.5	51.4	51.1	51.0	48.8	49.6
	5	35.7	35.6	38.6	40.5	42.9	43.6	44.6	46.2	44.6	45.0	43.1
	6	31.8	29.7	32.4	35.5	36.7	37.7	37.5	37.2	37.3	38.3	38.7
	7	—	—	—	—	—	—	—	—	—	—	—
	8	45.2	45.5	46.0	46.6	46.0	46.3	46.9	48.3	48.0	48.3	48.5
	9	50.8	51.0	53.2	53.6	55.6	54.1	52.6	51.2	51.8	52.1	51.8
	10	37.3	37.5	38.1	38.5	38.3	39.6	39.9	40.1	39.8	39.6	39.0
	11	35.7	35.9	36.3	36.7	37.0	37.2	37.7	37.9	37.9	37.7	37.5
	12	31.8	30.8	32.3	36.5	38.3	39.3	39.2	39.8	39.5	40.0	38.9
	13	34.4	34.0	34.7	37.4	38.6	39.6	40.4	41.0	40.8	40.0	39.2
	14	—	—	—	—	—	—	—	—	—	—	—
	15	38.2	38.7	38.9	40.0	41.3	41.5	40.0	40.6	41.2	41.3	40.7
	16	28.4	27.4	30.6	36.3	39.5	41.0	43.3	44.4	46.5	46.9	46.3
	17	46.0	46.1	45.9	46.6	48.7	50.6	52.4	50.6	49.5	52.0	51.7
	18	42.4	41.9	41.9	42.2	42.6	42.8	42.6	42.6	43.0	43.7	45.2
	19	33.8	33.6	31.4	30.8	29.9	28.4	28.4	29.6	28.6	28.2	27.6
	20	18.8	18.6	20.0	23.6	26.3	27.8	28.8	29.5	30.2	30.0	29.2
	21	—	—	—	—	—	—	—	—	—	—	—
	22	35.4	35.9	36.1	38.4	40.8	43.7	45.3	46.5	45.8	45.2	43.3
	23	42.0	42.3	42.6	43.9	45.5	47.6	50.0	51.2	50.8	51.3	51.6
	24	47.5	45.4	45.7	45.9	47.9	49.5	50.0	50.0	49.8	48.1	47.5
	25	40.4	40.4	39.3	41.9	42.4	42.4	41.4	40.3	39.3	39.1	38.9
	26	26.2	25.5	25.7	25.7	25.7	25.9	25.9	26.3	26.3	26.5	25.9
	27	21.6	25.4	26.5	27.5	26.7	27.8	27.8	30.8	31.6	31.2	29.9
	28	—	—	—	—	—	—	—	—	—	—	—
	29	9.6	9.3	9.8	10.1	11.2	13.4	13.4	13.7	14.3	15.4	15.4
	30	18.6	18.2	21.1	22.6	23.7	24.6	25.1	25.7	26.5	26.8	25.7
Hourly Mean.		36.15	35.93	37.15	38.72	39.80	40.72	41.17	41.58	41.55	41.50	41.01
DECEMBER.	1	31.8	33.3	36.1	37.2	37.9	38.9	40.6	40.2	40.6	42.2	38.8
	2	35.0	34.5	34.4	35.9	36.9	37.7	38.7	38.7	38.6	38.3	37.2
	3	33.1	33.6	33.5	33.6	33.7	34.2	34.1	33.8	32.3	32.0	31.3
	4	25.9	25.7	25.7	27.5	27.8	29.7	30.0	30.0	30.3	31.1	31.0
	5	—	—	—	—	—	—	—	—	—	—	—
	6	26.9	26.5	27.6	29.5	31.2	30.2	31.4	32.0	33.7	32.7	32.7
	7	32.7	31.7	31.6	36.1	37.7	38.4	39.1	39.5	40.0	39.8	38.1
	8	36.3	36.1	37.4	39.6	42.1	44.1	45.3	45.8	41.5	41.7	41.6
	9	37.6	37.1	36.5	36.1	36.5	37.5	38.2	38.5	39.7	41.6	42.3
	10	47.1	45.7	45.8	45.7	47.2	47.1	49.5	49.9	49.5	45.9	44.7
	11	33.4	33.9	31.7	35.1	36.1	36.5	36.1	37.1	37.4	37.6	36.2
	12	—	—	—	—	—	—	—	—	—	—	—
	13	37.0	36.9	36.1	36.1	36.1	36.1	36.7	36.3	31.6	33.5	33.7
	14	32.0	32.0	32.2	32.7	33.1	33.2	33.5	33.3	33.1	33.0	32.9
	15	31.1	32.1	29.9	30.1	31.0	31.6	32.3	32.8	32.7	32.7	31.8
	16	13.2	13.2	13.8	13.8	15.0	15.8	17.2	18.1	19.4	19.8	20.0
	17	16.4	17.5	18.2	19.2	21.2	21.5	24.0	25.9	27.1	27.5	27.6
	18	13.2	13.7	14.6	18.1	22.5	24.8	27.0	29.9	31.3	31.4	32.4
	19	—	—	—	—	—	—	—	—	—	—	—
	20	13.7	13.7	13.2	12.1	12.8	13.1	14.1	15.0	15.1	15.7	14.1
	21	10.4	9.9	9.5	10.3	13.0	16.1	17.2	18.2	18.7	20.2	21.3
	22	21.1	20.8	20.6	21.3	22.3	23.4	24.0	23.9	24.6	24.9	25.0
	23	17.7	17.7	19.9	19.4	20.2	21.9	23.6	24.0	24.0	24.4	24.4
	24	21.3	20.6	20.1	22.3	22.0	21.3	21.7	21.6	22.1	22.1	21.5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	13.0	12.0	10.7	12.1	15.7	17.3	18.8	18.2	19.1	19.8	19.8
	28	30.3	30.9	31.4	33.0	34.1	34.4	34.4	34.5	34.1	34.7	34.7
	29	37.2	38.0	38.3	39.5	41.7	43.4	43.4	42.4	42.2	42.1	41.9
	30	41.7	40.6	41.0	43.0	43.3	44.1	45.2	46.2	45.5	44.2	43.2
	31	42.4	41.7	41.9	42.4	43.9	45.1	45.1	44.9	44.9	44.2	43.6
Hourly Means		28.27	28.10	28.27	29.31	30.58	31.11	32.35	32.72	32.89	32.93	32.56

Christmas Day.

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
53.2	51.9	49.7	46.8	48.3	49.3	50.1	49.3	49.5	49.7	50.9	49.5	49.4	49.5	49.5	50.56
55.8	54.8	52.0	50.6	49.4	50.4	52.6	51.6	50.2	49.9	49.7	49.7	49.3	47.4	47.1	51.81
51.0	53.8	53.0	53.8	52.5	52.5	52.8	52.6	50.0	49.1	49.3	46.1	44.8	42.8	41.3	50.74
48.8	49.6	46.1	48.0	41.5	42.4	38.5	41.1	40.9	40.0	37.5	35.7	34.9	35.1	36.3	43.46
45.0	43.1	41.2	38.5	37.1	36.1	35.3	36.1	35.3	35.3	34.5	33.8	33.1	32.7	32.2	38.44
38.3	38.7	36.1	32.9	30.3	29.3	29.7	29.7	29.5	—	—	—	—	—	—	36.51
—	—	—	—	—	—	—	—	—	43.7	43.6	44.2	44.6	44.8	45.0	—
48.3	48.5	48.3	48.3	48.3	48.5	48.1	48.0	48.2	49.3	49.1	49.1	50.8	50.6	51.8	48.08
52.1	51.8	47.4	46.5	41.7	41.3	43.8	42.8	42.1	38.7	37.3	37.3	37.5	37.6	38.1	46.45
39.6	39.0	38.6	37.7	37.3	36.9	37.2	36.7	35.7	35.9	35.9	35.7	35.5	35.5	35.5	37.56
37.7	37.5	36.7	36.4	36.0	35.7	35.5	35.5	35.5	35.5	34.9	34.7	34.1	33.5	33.0	36.02
40.0	38.9	37.9	37.5	36.9	36.5	35.7	35.7	35.7	36.1	36.9	37.3	37.3	37.0	36.6	36.75
40.0	39.2	39.1	39.6	40.0	40.0	40.0	40.2	38.9	—	—	—	—	—	—	38.46
—	—	—	38.9	37.4	36.9	35.6	35.5	3.5	33.7	33.7	37.7	37.3	36.7	37.9	37.00
41.3	40.7	40.0	45.2	45.7	45.5	45.2	45.2	40	45.9	45.9	—	—	46.7	45.3	42.77
46.9	46.3	45.7	47.7	47.3	47.6	46.3	46.1	46.3	46.3	45.9	—	—	44.2	44.0	47.48
52.0	51.7	49.3	45.3	45.3	45.3	49.9	48.1	46.3	45.3	43.3	41.8	40.4	37.3	36.1	43.25
43.7	45.2	45.5	27.6	26.7	26.1	25.6	24.9	23.8	22.8	21.7	21.5	20.2	20.0	19.0	26.63
28.6	28.2	27.6	29.1	30.7	31.8	31.4	31.1	30.6	—	—	—	—	—	—	29.25
30.0	29.2	27.9	—	—	—	—	—	—	33.1	33.1	34.1	35.1	35.6	35.6	—
45.2	43.3	41.5	40.4	40.3	40.4	41.0	41.5	41.5	42.1	41.9	42.2	42.6	42.2	41.7	41.49
51.3	51.6	52.4	51.4	51.8	51.2	51.2	51.8	50.8	49.7	49.1	48.3	49.7	49.1	49.4	48.95
48.1	47.5	47.1	45.8	44.3	43.3	42.4	42.3	42.1	41.9	41.5	41.1	40.9	40.7	40.8	45.06
39.1	38.9	37.7	37.7	37.3	36.9	36.0	35.1	33.9	32.9	31.6	31.2	30.6	28.4	27.1	36.72
26.5	25.9	24.1	23.7	22.6	22.5	21.7	21.3	20.4	19.6	20.5	21.5	22.1	22.5	25.0	23.86
31.2	29.9	30.1	30.1	30.1	29.9	31.1	30.6	30.0	—	—	—	—	—	—	24.02
—	—	—	12.1	11.6	11.6	12.1	12.6	14.3	15.2	17.4	17.2	16.2	18.1	18.3	13.57
15.4	15.4	15.4	23.8	25.1	26.3	27.5	29.5	30.4	30.4	30.0	26.1	23.6	24.2	24.2	25.16
41.50	41.01	39.52	38.86	38.29	38.20	38.22	38.20	37.85	37.43	37.07	36.46	36.15	35.75	35.67	38.46
42.2	38.8	38.1	37.5	35.9	36.1	35.7	31.8	36.1	36.7	36.7	36.0	35.7	35.7	35.1	36.99
38.3	37.2	35.6	35.4	35.4	35.6	35.3	34.9	33.7	32.9	33.6	33.5	33.9	33.8	33.5	35.52
32.0	31.3	30.6	29.9	29.2	29.0	28.8	28.8	28.4	27.6	26.9	27.4	26.7	26.3	26.1	30.48
31.1	31.0	30.9	31.1	31.7	32.5	33.7	33.9	33.7	—	—	—	—	—	—	29.17
—	—	—	—	—	—	—	—	—	26.3	26.5	26.8	26.4	25.5	26.4	—
32.7	32.7	29.9	28.4	31.8	30.4	28.9	33.1	32.7	32.7	32.3	32.8	32.9	33.0	32.9	31.09
39.8	38.1	35.2	32.7	32.2	31.4	31.8	33.1	31.8	32.4	32.2	33.3	33.1	31.9	35.9	34.82
44.7	44.6	43.9	42.9	41.9	41.6	41.7	41.5	42.6	42.6	42.4	41.0	40.4	39.8	38.1	41.70
41.6	42.3	42.8	43.0	43.7	43.7	41.8	41.3	47.1	46.5	46.9	45.3	44.8	46.0	46.2	41.95
45.9	44.7	44.0	42.1	41.2	41.2	40.2	39.3	38.7	38.4	37.9	36.5	35.3	33.2	33.3	42.48
37.6	36.2	33.7	29.9	28.4	27.4	27.9	27.2	28.3	—	—	—	—	—	—	24.63
—	—	—	—	—	—	—	—	—	39.6	39.2	39.0	38.7	39.0	38.7	—
33.5	33.7	33.3	33.1	33.1	31.4	31.8	30.8	31.0	30.7	30.6	30.6	31.2	31.4	31.8	33.50
33.0	32.9	32.7	32.9	32.9	32.9	32.7	32.4	32.4	32.4	33.4	33.3	33.5	33.7	33.9	32.92
32.7	31.8	29.7	28.8	26.9	25.7	23.0	20.6	19.4	17.7	16.6	15.2	14.1	13.0	12.6	25.61
19.8	20.0	21.2	21.5	21.5	20.7	20.4	20.6	20.0	18.8	17.7	16.1	15.2	15.0	16.4	17.68
27.5	27.6	26.1	25.5	24.6	24.6	23.0	21.1	18.9	18.4	16.5	14.5	14.0	14.8	14.5	20.94
31.4	32.4	33.1	33.9	33.7	34.3	33.7	31.9	33.5	—	—	—	—	—	—	24.93
—	—	—	—	—	—	—	—	—	18.4	18.3	18.0	17.7	16.4	16.2	—
15.7	14.1	11.0	10.6	9.7	9.0	10.5	10.7	10.9	10.9	10.1	9.9	10.0	9.7	8.9	11.87
20.2	21.3	21.5	21.5	23.2	23.4	23.7	23.8	24.2	24.4	24.8	24.0	23.2	22.1	21.5	19.42
24.9	25.0	24.4	24.3	19.6	19.6	18.4	18.6	19.0	17.7	17.3	17.3	17.2	17.5	17.5	20.72
24.4	24.6	24.4	24.2	24.2	24.2	24.2	24.5	24.2	22.9	23.2	23.9	24.4	23.8	22.9	22.85
22.1	21.5	20.9	20.8	20.4	20.0	19.2	18.5	18.2	—	—	—	—	—	—	18.55
—	—	—	—	—	—	—	—	—	9.9	10.1	10.7	12.0	14.3	13.4	—
19.8	19.4	19.8	19.6	19.4	19.0	21.5	22.7	24.5	25.0	26.1	26.0	27.0	28.4	29.2	20.18
31.7	34.7	34.7	34.7	35.3	35.3	36.1	35.4	35.5	36.1	36.3	37.0	36.5	36.7	37.1	34.72
42.1	42.4	41.9	41.2	40.4	39.8	38.8	38.7	38.6	40.0	40.3	41.0	41.7	42.3	42.3	40.69
41.2	44.2	43.2	42.8	43.2	43.2	42.1	42.0	41.6	41.5	41.6	41.6	41.2	40.6	42.0	42.74
41.2	44.0	43.6	43.2	42.4	42.1	41.9	43.4	43.2	44.0	44.6	45.1	45.7	45.8	46.1	43.83
32.93	32.56	31.76	31.10	30.84	30.54	30.38	30.25	30.32	29.40	29.31	29.07	28.94	28.95	28.94	30.38

STANDARD THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	—	—	—	—	—	—	—	—	—	—	—	—
	45°8	46°9	46°3	46°7	46°3	47°8	48°2	48°0	48°9	48°5	51°5	51°4
	—	—	—	—	—	—	—	—	—	—	—	—
	33°0	33°0	33°9	35°4	36°0	36°9	37°1	37°9	38°2	38°3	37°7	36°7
	34°7	33°8	31°9	30°3	30°1	28°9	27°6	27°1	26°6	25°6	23°9	21°5
	23°8	25°5	26°7	27°4	27°8	29°1	31°6	31°9	31°7	30°9	35°1	31°2
	11°8	10°9	10°0	10°0	10°7	12°0	12°7	14°0	13°2	13°9	13°8	13°0
	12°8	13°7	13°9	14°8	15°0	16°0	18°4	19°4	19°8	19°8	19°6	19°7
	30°3	31°2	31°0	30°8	31°4	32°0	32°3	33°7	34°1	32°7	32°1	30°6
	—	—	—	—	—	—	—	—	—	—	—	—
	—11°3	—12°0	—11°8	—9°3	—6°9	—4°6	—2°5	0°6	0°2	0°2	0°1	0°9
	8°8	9°2	15°0	16°9	17°8	19°8	20°0	21°7	22°5	22°5	21°7	21°1
	10°9	8°1	7°2	13°7	13°7	19°1	21°7	25°0	26°7	25°9	25°0	21°3
	33°3	33°7	33°1	35°2	35°9	35°9	35°6	36°9	37°1	37°2	36°9	35°6
	36°7	36°8	37°1	37°3	37°3	37°9	37°8	38°1	38°3	38°3	38°3	38°2
	39°8	39°6	41°1	41°2	42°4	43°2	44°4	44°1	44°6	47°3	47°1	43°8
	—	—	—	—	—	—	—	—	—	—	—	—
	31°5	31°3	25°9	21°8	23°4	24°0	24°3	25°0	25°7	26°5	25°3	24°8
	30°3	25°3	22°7	22°8	21°9	21°1	21°5	21°1	20°4	20°6	18°8	17°6
	5°0	5°0	5°7	9°2	13°2	14°6	17°4	18°1	19°8	21°3	21°9	21°1
	29°7	30°2	30°4	33°5	36°0	37°6	38°5	38°8	40°6	41°9	39°2	37°1
	38°3	38°0	38°0	40°6	43°2	45°2	45°3	44°4	41°9	38°2	31°2	32°0
	15°2	15°4	16°9	18°4	20°0	22°7	25°3	26°3	27°8	29°7	29°2	27°2
	—	—	—	—	—	—	—	—	—	—	—	—
	21°9	20°6	21°1	26°7	29°5	30°6	31°2	31°0	32°7	32°7	32°3	30°8
	27°4	28°0	28°9	33°5	36°1	37°7	37°7	38°2	39°8	39°9	38°3	37°9
	38°0	37°7	37°9	38°2	38°2	38°0	38°3	38°5	39°3	39°6	39°8	40°0
	38°1	37°1	37°9	38°7	39°9	40°7	42°3	41°4	40°2	40°2	39°3	38°3
	31°0	31°7	31°8	31°4	33°8	31°5	35°1	35°5	35°5	35°1	34°3	33°1
	26°5	29°5	30°7	31°6	31°6	31°3	31°6	31°8	32°1	32°1	32°1	31°6
	—	—	—	—	—	—	—	—	—	—	—	—
	33°3	33°9	34°3	35°9	36°2	36°7	37°3	37°8	37°9	39°2	38°9	39°3
Hourly Means	26°02	25°90	26°06	27°53	28°09	29°07	30°57	31°19	31°15	31°73	31°00	29°66
FEBRUARY.	—	—	—	—	—	—	—	—	—	—	—	—
	27°1	27°4	28°0	29°1	30°2	30°2	28°9	27°6	28°6	29°2	29°0	26°9
	20°8	21°3	21°7	28°7	33°7	35°5	35°5	36°1	36°5	36°5	35°9	34°1
	28°6	27°4	27°4	31°8	35°7	38°1	39°3	41°0	41°4	40°8	39°1	36°3
	32°0	33°7	31°3	36°7	39°3	39°6	39°6	38°7	37°5	37°4	37°5	37°2
	28°8	28°0	27°4	27°1	27°9	28°4	28°3	27°8	28°1	28°0	27°6	26°1
	—	—	—	—	—	—	—	—	—	—	—	—
	22°7	21°7	21°6	21°7	22°9	23°6	24°9	25°3	26°7	26°9	26°9	26°1
	18°9	19°5	20°2	21°5	23°2	24°0	25°3	26°9	28°2	27°8	26°9	26°1
	22°3	22°5	25°5	29°5	29°0	31°6	33°7	33°5	34°9	34°5	34°5	33°7
	21°1	18°7	16°5	13°3	13°9	14°3	15°1	16°0	16°9	16°6	16°0	14°5
	0°4	0°6	1°0	3°2	5°5	8°2	10°6	11°8	12°7	14°1	14°8	14°2
	13°0	13°4	14°1	15°6	19°6	21°7	22°8	24°1	25°5	25°3	24°1	22°6
	—	—	—	—	—	—	—	—	—	—	—	—
	19°2	18°2	20°2	27°6	32°1	34°3	36°9	37°9	38°9	38°8	38°3	36°9
	20°3	18°8	19°0	21°5	24°7	27°3	30°1	33°3	32°4	31°6	32°0	31°3
	21°7	24°8	26°1	32°0	34°1	35°7	36°7	36°7	35°9	35°8	35°3	33°3
	21°7	20°7	25°5	30°2	33°8	35°7	36°7	36°9	36°8	36°1	35°3	32°7
	20°6	20°8	25°7	31°9	34°8	36°3	37°1	37°7	38°1	37°4	37°7	36°9
	30°8	31°7	32°9	34°9	35°9	37°1	39°0	39°5	39°3	38°1	36°9	36°7
	—	—	—	—	—	—	—	—	—	—	—	—
	36°9	37°1	37°1	39°1	40°0	41°5	43°8	45°3	46°3	46°9	46°5	43°0
	30°3	31°6	33°1	34°4	35°9	37°7	38°7	40°6	39°7	37°1	36°6	35°8
	31°5	29°8	32°7	35°0	35°7	35°7	35°1	37°2	33°4	33°9	32°4	30°8
	22°4	13°0	21°1	24°9	25°8	27°5	26°9	28°0	29°0	30°1	30°3	27°6
	11°0	10°6	12°1	15°8	17°7	19°0	20°1	20°8	23°6	22°3	23°4	21°5
	12°1	12°2	19°2	26°3	30°3	31°1	31°8	33°5	34°3	34°3	34°2	32°7
	—	—	—	—	—	—	—	—	—	—	—	—
	28°2	28°4	29°7	28°8	29°9	30°8	31°8	33°8	34°9	36°1	36°2	36°8
Hourly Means	22°60	22°58	23°98	26°70	28°82	30°21	31°20	32°10	32°50	32°32	31°99	30°58

STANDARD THERMOMETER.

9	10	11
3	4	5
48°5	51°5	51°1
38°3	37°7	36°7
25°6	23°9	21°7
36°9	35°1	31°2
15°9	13°8	13°0
19°8	19°6	19°7
32°7	32°1	30°6
0°2	0°1	0°6
22°5	21°7	21°1
26°9	25°0	21°3
37°2	36°9	36°9
38°3	37°3	38°2
47°3	47°1	43°8
26°5	25°3	24°8
20°6	18°8	17°6
21°3	21°9	21°1
41°9	39°2	37°1
58°2	51°2	32°0
29°7	29°2	27°2
32°7	32°3	30°8
39°9	38°3	35°9
29°6	29°8	40°0
19°2	39°3	38°1
35°1	33°3	33°1
32°1	32°1	31°6
39°2	38°9	39°5
51°7·3	51°00	29°0

29'2	29'0	26'6
33'5	33'9	34'1
40'8	39'1	36'3
37'4	37'5	37'2
28'0	27'6	26'7
---	---	---
26'9	26'9	26'1
57'8	26'9	26'1
31'5	31'5	30'7
16'6	16'0	11'5
11'1	11'8	11'2
25'3	21'1	22'6
---	---	---
58'8	58'3	36'6
31'6	32'0	31'3
35'8	35'3	33'1
26'1	35'3	32'7
37'4	37'7	36'9
38'1	36'9	36'7
---	---	---
46'9	16'5	43'0
57'1	36'6	35'8
33'9	32'4	30'8
30'1	30'3	27'6
22'3	23'4	21'5
31'3	31'2	32'7
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36'1	36'2	36'8
---	---	---
32'32	31'59	30'58

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
°	°	°	°	°	°	°	°	°	°	°	°	°
43.2	40.6	38.9	37.1	36.1	34.5	—	—	—	—	—	—	41.75
36.7	37.3	37.2	37.3	37.3	37.7	37.3	37.6	36.7	35.5	34.0	36.3	36.58
20.2	19.7	19.4	19.0	18.6	18.4	18.2	19.0	19.3	20.3	20.5	20.5	23.96
28.6	26.7	26.4	24.3	20.0	18.2	17.2	16.9	17.7	14.8	12.1	12.0	21.95
12.1	11.7	11.0	11.0	10.5	10.6	10.5	10.7	10.8	11.3	11.2	12.3	11.65
22.8	23.6	23.5	21.8	25.6	26.5	27.2	27.2	28.4	28.8	29.5	30.1	21.70
29.9	29.9	29.6	26.9	25.5	23.6	—	—	—	—	—	—	20.73
—	—	—	—	—	—	—	—	—	—	—	—	—
5.3	7.3	7.3	6.5	7.7	8.9	9.1	8.6	5.3	2.7	0.1	0.2	5.20
20.8	21.1	21.4	21.5	21.5	21.3	21.1	21.1	20.4	20.0	14.6	9.2	18.79
21.1	26.1	26.7	26.7	28.0	28.4	27.8	29.1	29.3	32.0	32.4	33.1	23.84
36.7	36.9	36.7	36.9	36.7	36.6	36.9	36.9	36.7	35.9	37.1	36.5	36.22
38.7	39.1	39.5	39.6	40.0	39.8	39.6	40.6	39.8	39.6	40.0	39.8	38.68
40.0	37.5	36.4	36.1	34.4	34.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
25.7	26.2	26.5	27.6	26.4	27.4	28.0	28.0	30.3	31.0	30.8	30.8	27.13
16.0	14.4	13.9	11.1	14.8	15.0	13.7	10.3	9.1	7.1	6.4	5.7	16.86
20.6	23.6	23.8	24.6	25.3	25.0	26.3	25.5	25.5	27.4	27.9	29.2	19.88
36.4	34.1	35.7	36.1	35.9	37.7	38.1	38.7	39.1	39.5	39.3	38.6	36.78
30.6	28.4	26.5	24.2	23.7	22.3	20.4	19.2	19.0	18.1	17.0	16.9	31.07
26.5	23.4	23.0	22.3	22.5	21.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
24.8	27.5	24.7	26.5	26.3	26.3	25.9	24.6	24.0	23.8	24.6	24.4	23.24
36.7	36.7	36.5	35.5	36.1	35.7	36.1	36.7	37.3	37.7	37.3	38.2	36.00
40.8	40.3	38.9	38.9	38.1	38.3	37.3	36.5	37.1	37.6	37.6	37.9	38.45
37.5	36.3	34.5	33.3	35.3	35.0	34.3	34.8	34.5	34.6	34.8	35.2	37.19
33.2	33.8	33.3	33.5	30.7	28.6	27.1	26.3	25.7	25.5	25.3	24.7	31.27
30.8	30.6	30.0	29.7	29.2	29.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
35.7	32.0	31.6	29.2	26.3	24.1	23.1	25.1	25.3	25.3	25.5	25.7	32.13
—	—	—	—	—	—	—	—	—	—	—	—	—
28.65	28.08	27.67	27.35	26.81	26.51	27.16	24.96	25.15	25.28	25.16	24.90	27.70
—	—	—	—	—	—	—	—	—	—	—	—	—
26.3	23.8	21.1	19.4	17.7	19.0	18.6	19.4	20.8	21.7	22.5	22.1	24.73
33.1	33.1	32.7	32.4	32.0	32.4	32.9	32.9	32.7	31.6	31.3	31.0	31.85
32.5	31.4	31.0	30.0	29.0	28.7	27.5	27.2	27.6	28.1	29.5	31.4	32.55
37.1	36.1	34.1	33.7	32.7	31.8	31.0	30.1	29.7	29.5	29.2	29.0	34.48
25.3	25.0	24.4	24.6	24.4	24.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
24.0	22.3	20.6	20.6	18.8	18.6	16.6	16.4	16.2	12.5	12.3	12.0	25.86
25.3	25.3	25.3	25.6	26.0	24.2	23.2	21.8	19.2	16.6	17.3	18.1	21.54
33.1	32.7	32.4	32.0	31.8	30.8	29.1	27.4	27.0	18.1	21.2	22.1	23.58
13.3	12.4	12.2	12.2	12.0	9.9	7.8	5.7	4.3	2.5	1.9	1.2	12.01
12.6	12.6	13.0	12.8	12.4	12.2	12.6	13.1	13.1	13.4	13.4	13.2	10.49
20.5	17.7	16.6	15.2	14.4	13.9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
34.9	33.1	31.6	30.0	27.6	27.1	24.3	23.5	24.4	23.9	23.6	22.8	29.74
28.6	26.7	26.6	23.6	23.5	23.8	21.7	20.8	20.3	20.3	20.0	22.7	25.04
28.8	27.0	26.0	25.5	25.3	24.2	24.0	23.6	24.4	23.6	22.3	21.9	28.53
31.5	28.0	27.4	25.9	25.3	24.4	24.1	22.7	21.8	21.5	20.4	22.1	28.22
32.0	30.1	29.2	28.8	29.7	29.7	30.1	29.5	30.0	29.6	29.3	29.2	31.32
37.8	37.7	38.6	38.4	38.1	37.0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
38.2	38.7	38.3	38.6	36.7	35.1	34.9	37.8	37.4	37.6	37.5	37.5	36.95
34.7	34.1	33.8	33.7	32.7	33.5	32.7	32.4	32.4	32.3	31.1	32.0	38.56
29.5	28.4	27.6	27.9	26.9	26.8	26.5	26.1	24.1	22.7	22.3	22.1	29.75
24.0	22.1	22.1	22.5	22.1	21.9	20.4	19.0	17.5	16.3	13.1	12.5	23.05
19.2	19.1	17.6	16.0	15.5	16.0	18.1	15.1	14.5	14.3	13.4	12.4	17.05
30.6	29.8	29.1	30.4	29.7	28.9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
35.4	33.9	32.1	32.7	31.6	29.7	28.6	26.8	25.0	22.9	23.2	20.9	25.43
—	—	—	—	—	—	—	—	—	—	—	—	—
28.68	27.55	26.81	26.35	25.75	25.12	24.61	23.82	23.28	22.97	22.67	22.93	26.96

STANDARD THERMOMETER.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	1	10°1	7°2	9°6	10°7	12°4	15°2	18°2	20°0	21°1	18°9	20°0
	2	8°0	8°7	11°9	14°1	16°2	16°9	18°4	20°8	20°8	20°3	20°0
	3	18°4	18°6	17°5	18°6	19°5	21°6	22°9	23°9	26°0	26°4	25°3
	4	18°3	17°7	18°8	20°2	23°4	23°2	24°4	24°0	23°6	21°9	20°9
	5	—	—	—	—	—	—	—	—	—	—	—
	6	20°0	19°8	21°7	23°4	25°3	26°1	27°1	28°7	31°0	32°0	32°8
	7	17°3	20°0	24°1	31°0	34°4	36°1	38°5	39°8	40°6	41°6	41°1
	8	36°5	37°9	38°9	39°8	42°8	44°4	44°8	45°0	43°6	47°4	40°8
	9	23°6	22°9	23°8	24°8	25°7	25°9	26°9	27°1	28°4	29°2	28°4
	10	16°4	16°3	16°2	18°4	20°9	23°8	26°3	28°4	32°0	31°1	29°6
	11	16°5	17°7	21°1	26°3	29°2	30°6	33°1	32°9	33°9	34°7	34°0
	12	—	—	—	—	—	—	—	—	—	—	—
	13	24°1	24°6	24°5	24°3	23°0	24°5	24°6	25°3	25°3	23°0	22°9
	14	11°6	11°1	12°6	13°2	15°6	15°2	15°6	15°6	14°8	13°9	12°2
	15	2°7	3°9	5°9	8°0	10°9	12°0	14°8	15°5	17°1	17°5	17°3
	16	11°6	13°1	16°6	20°4	22°3	24°3	25°7	27°0	28°2	28°8	28°1
	17	24°2	25°1	25°7	24°7	24°7	25°1	25°7	25°8	26°3	26°4	27°0
	18	20°0	22°9	27°4	30°7	32°1	33°1	33°8	34°9	33°9	33°2	32°7
	19	—	—	—	—	—	—	—	—	—	—	—
	20	24°8	26°8	31°0	32°7	34°9	34°7	35°3	34°5	35°0	35°7	36°5
	21	40°4	39°5	39°1	41°9	43°7	46°6	48°1	48°9	49°3	49°3	48°3
	22	30°4	32°2	34°2	36°3	36°9	37°3	37°5	37°5	37°3	37°7	37°1
	23	33°7	33°9	34°7	35°1	37°8	39°4	40°2	41°2	39°5	40°2	39°7
	24	28°2	32°4	35°7	37°0	39°1	38°9	39°2	39°6	38°3	38°8	39°2
	25	36°2	37°1	40°6	41°8	39°1	39°3	39°3	39°6	41°5	44°2	44°2
	26	—	—	—	—	—	—	—	—	—	—	—
	27	33°3	33°3	33°3	33°9	34°7	36°7	40°2	41°5	41°7	40°6	39°1
	28	27°4	29°5	33°3	37°1	40°0	43°2	41°6	43°8	45°6	44°5	44°6
	29	32°0	36°1	41°5	45°3	47°3	48°3	50°6	52°6	57°8	57°7	58°9
	30	33°2	37°5	38°9	40°8	40°8	41°0	41°5	40°6	43°0	44°4	45°3
	31	36°3	38°5	42°5	48°0	51°4	55°0	57°1	56°9	58°3	61°9	59°9
Hourly Means	23°53	24°60	26°71	28°83	30°52	31°79	33°13	33°76	34°59	34°86	34°29	33°32
APRIL.	1	33°7	34°3	33°7	33°7	34°5	36°8	36°7	36°4	36°4	36°9	35°7
	2	—	—	—	—	—	—	—	—	—	—	—
	3	33°1	38°1	40°8	42°3	43°8	44°4	44°4	45°3	45°3	45°2	47°9
	4	43°1	43°2	42°8	44°4	44°9	44°9	45°3	45°4	47°5	46°7	45°2
	5	31°9	33°2	34°6	36°5	38°9	41°3	43°9	42°4	41°9	41°6	41°3
	6	29°7	33°1	37°8	42°9	44°5	46°0	46°3	46°9	46°9	47°9	48°3
	7	35°3	38°5	41°9	45°7	46°8	46°3	45°3	44°4	41°6	46°0	45°2
	8	29°5	34°4	43°2	46°9	48°2	48°7	49°9	50°1	53°3	53°9	53°2
	9	—	—	—	—	—	—	—	—	—	—	—
	10	38°1	45°1	54°0	59°7	58°7	62°5	63°1	65°4	64°5	62°5	63°4
	11	46°9	48°5	51°4	50°7	50°6	51°5	51°0	50°4	50°4	48°9	47°3
	12	32°2	38°9	43°6	48°3	50°1	51°0	50°4	53°8	54°4	53°4	52°4
	13	37°1	38°7	39°4	39°5	41°2	40°4	40°2	42°6	40°4	40°4	40°0
	14	37°5	39°1	39°5	41°8	42°9	43°4	45°5	48°1	45°5	45°7	45°2
	15	40°6	44°0	47°7	50°0	53°4	55°1	56°3	56°7	56°5	56°7	56°1
	16	—	—	—	—	—	—	—	—	—	—	—
	17	33°6	36°0	36°8	38°2	40°4	42°2	43°8	45°1	45°2	42°5	43°4
	18	33°8	33°3	34°7	35°3	36°0	37°3	37°3	32°2	29°2	29°0	29°9
	19	26°3	30°6	32°2	33°3	35°9	36°7	39°5	39°1	39°4	37°9	38°2
	20	27°6	31°8	39°1	41°0	42°5	43°8	46°9	47°9	49°1	50°4	48°1
	21	—	—	—	—	—	—	—	—	—	—	—
	22	41°5	41°9	43°6	45°2	44°4	45°3	48°9	49°9	49°0	46°7	48°1
	23	—	—	—	—	—	—	—	—	—	—	—
	24	36°3	36°7	37°5	40°4	42°3	43°2	44°0	43°4	42°8	43°2	42°3
	25	28°8	33°9	36°5	41°0	42°3	43°4	45°0	46°0	45°6	43°6	44°4
	26	33°3	36°7	38°7	40°6	44°0	44°5	45°1	45°1	48°1	46°7	47°2
	27	29°6	38°4	42°7	45°3	46°7	49°5	49°8	52°8	52°8	54°2	50°1
	28	38°8	46°4	41°5	42°4	44°0	45°7	44°8	46°1	48°3	49°6	47°9
	29	42°6	44°4	43°9	42°8	44°2	45°5	47°8	49°1	49°3	50°4	48°7
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	35°04	38°30	40°73	42°41	44°22	45°39	46°15	46°86	46°92	46°67	46°40	45°84

* Good Friday.

STANDARD THERMOMETER.

9	10	11
3	4	5
18°9	20°0	18°0
20°3	20°0	17°7
26°4	25°3	24°4
21°9	20°9	19°5
32°0	32°8	32°7
41°6	41°1	40°0
47°4	40°8	36°5
29°2	28°4	27°4
31°1	29°6	29°7
34°7	34°0	33°1
23°0	22°9	22°7
13°9	12°2	10°4
17°5	17°3	16°4
28°8	28°1	28°4
26°4	27°0	26°8
33°2	32°7	32°0
35°7	36°5	36°6
49°3	48°3	46°0
37°7	37°1	36°1
40°2	39°7	39°6
38°8	39°2	37°5
44°2	44°2	44°1
40°6	39°1	38°0
44°5	44°6	44°6
57°7	58°9	58°9
44°4	45°3	44°8
61°9	59°9	57°5
34°86	34°29	33°32

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
16°2	15°2	13°0	8°0	12°2	11°3	6°4	0°8	4°5	8°0	8°4	8°8	12°26
15°5	15°0	15°0	15°6	15°3	16°0	17°5	18°2	18°8	19°0	19°3	19°0	16°58
22°9	21°1	19°0	18°4	17°6	17°3	14°6	18°4	20°2	20°8	21°1	18°4	20°29
18°1	17°5	17°6	17°4	18°0	16°6	—	—	—	—	—	—	20°28
32°2	26°9	23°2	20°5	20°2	20°7	19°2	20°2	21°3	20°3	21°9	22°8	23°70
39°8	38°5	37°9	38°7	39°0	39°1	38°1	38°7	39°3	38°5	38°1	37°0	36°15
35°5	34°9	34°5	34°3	34°4	34°1	33°5	34°9	29°9	28°7	27°8	27°1	36°88
27°5	26°4	26°3	26°5	25°2	24°7	24°3	24°0	21°2	20°7	18°5	17°5	21°87
27°8	25°5	22°9	20°8	20°6	20°2	20°0	18°6	17°6	16°9	16°0	17°3	22°22
31°6	29°9	29°8	29°9	29°1	30°3	—	—	—	—	—	—	28°83
—	—	—	—	—	—	30°6	30°8	28°8	27°4	26°1	24°4	19°77
20°0	18°8	18°0	17°3	16°0	15°2	14°5	14°0	13°4	13°1	12°8	12°6	9°30
7°8	6°8	6°6	5°7	5°6	5°3	4°8	4°6	3°7	3°5	3°6	3°3	10°59
12°4	12°4	12°0	10°9	10°2	9°6	9°0	8°6	7°4	7°2	9°9	10°5	24°33
14°5	27°4	26°5	26°3	26°3	26°1	25°7	25°3	24°7	24°4	24°8	24°6	22°73
27°4	22°9	21°1	20°8	19°6	18°4	19°4	17°8	16°0	17°8	18°6	19°4	22°28
26°3	31°2	31°0	31°0	30°3	30°1	—	—	—	—	—	—	35°58
31°6	37°1	37°1	36°6	36°1	35°4	35°0	35°1	35°5	37°1	43°7	43°5	39°38
37°1	41°2	38°2	37°1	36°0	33°8	33°3	31°8	31°4	30°8	30°6	29°7	34°51
41°2	34°9	33°8	32°8	32°9	32°4	32°7	33°1	32°4	32°9	33°4	33°7	34°12
33°3	35°5	32°8	30°6	29°5	29°0	29°0	28°6	27°8	28°6	27°4	28°0	36°37
31°1	31°1	31°8	35°1	35°5	36°0	36°7	36°8	35°7	36°0	36°7	36°3	39°50
43°0	42°6	42°2	41°4	41°1	40°6	—	—	—	—	—	—	34°11
36°6	35°1	34°1	33°3	31°1	30°8	29°5	29°9	28°2	28°4	28°2	27°4	39°26
42°4	41°1	40°8	40°8	40°6	39°5	38°7	36°3	38°9	36°4	36°1	32°4	43°38
55°6	47°8	44°2	40°7	38°8	36°9	34°1	32°0	31°4	31°8	30°1	30°6	39°78
42°6	40°6	39°8	39°6	39°6	38°9	38°3	37°9	37°3	36°7	36°0	35°5	47°02
54°0	51°2	49°1	48°3	47°5	40°7	37°3	36°9	35°9	35°1	34°7	34°5	28°94
31°64	29°91	28°84	28°03	27°59	26°61	26°20	25°51	25°20	25°29	25°13	24°74	34°34
34°7	33°3	32°8	32°8	32°3	32°0	31°9	31°3	30°9	33°7	34°4	31°8	44°10
46°6	46°0	46°5	45°3	44°8	46°3	46°9	45°7	45°5	44°3	45°2	44°0	40°85
43°0	42°3	41°0	39°3	37°7	37°2	36°6	34°9	33°9	33°3	32°1	30°9	35°65
41°4	38°3	36°1	34°5	33°5	32°0	30°3	29°2	28°0	27°8	27°6	27°5	31°14
48°2	41°8	41°9	40°6	38°7	38°1	36°9	35°2	35°7	35°7	35°4	34°1	28°2
41°6	40°4	36°7	35°0	35°5	37°2	33°9	34°7	33°7	30°7	30°1	28°2	41°08
53°0	47°5	42°6	41°4	40°6	40°8	—	—	—	—	—	—	46°31
59°3	58°7	57°3	51°0	49°1	47°5	48°3	51°2	51°2	50°9	47°1	43°9	54°70
47°7	47°1	47°5	49°7	49°9	48°7	46°3	41°4	37°3	34°5	35°1	31°3	46°31
48°1	47°7	46°7	48°1	48°7	45°0	43°8	44°1	43°8	42°5	40°6	39°8	46°54
38°7	37°7	36°9	37°1	36°8	36°2	36°9	36°7	35°7	36°7	36°7	37°1	38°40
41°3	40°0	38°3	37°7	40°0	39°5	35°4	35°1	40°0	40°3	39°8	39°2	40°98
53°4	48°9	46°3	45°0	44°6	43°6	—	—	—	—	—	—	47°01
42°8	39°5	38°7	38°7	38°7	38°7	39°3	38°1	37°8	36°1	35°4	34°3	39°55
30°1	29°5	29°7	30°3	29°8	27°8	26°8	27°4	25°7	24°7	24°5	24°0	32°75
38°6	35°9	33°0	34°5	31°2	27°8	27°1	25°9	25°0	26°9	26°3	25°0	43°63
47°5	43°8	40°9	40°4	39°6	39°6	—	—	—	—	—	—	42°94
—	—	—	—	—	—	48°7	49°8	47°4	45°7	45°3	42°1	36°96
52°0	44°8	44°6	42°3	40°6	35°9	—	—	—	—	—	—	39°78
41°9	39°1	36°9	35°4	35°1	32°4	31°0	30°6	30°6	26°9	26°3	26°9	38°26
41°0	41°3	41°5	40°8	40°4	43°8	42°4	38°7	36°5	34°1	32°0	29°9	44°10
44°3	41°5	39°3	37°5	36°5	33°1	31°0	28°4	28°4	27°6	26°7	27°4	43°39
47°3	44°8	44°8	41°5	38°7	37°4	37°9	37°3	36°3	36°2	37°0	37°8	42°85
45°3	43°8	42°4	42°9	43°5	42°9	42°9	42°8	42°6	42°4	42°2	42°0	41°17
48°3	44°6	42°1	39°6	38°8	34°8	—	—	—	—	—	—	—
—	—	—	—	—	—	36°7	36°3	35°5	34°7	38°5	39°5	—
44°96	42°55	41°02	40°06	39°38	38°26	37°88	37°13	36°50	35°60	35°18	34°18	—

STANDARD THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	40°8	42°6	44°0	46°9	48°1	48°9	49°7	46°3	44°5	46°3	47°4
	2	41°4	42°3	43°8	50°7	53°6	51°7	52°5	53°3	54°0	53°1	53°1
	3	45°6	51°4	55°0	56°2	59°5	60°4	61°4	60°1	61°3	64°1	63°7
	4	46°4	49°4	53°2	58°3	57°9	58°7	56°5	55°2	54°7	54°0	52°0
	5	51°2	63°3	60°9	65°9	67°7	69°7	69°3	70°9	68°5	69°7	70°0
	6	52°4	59°7	62°7	65°0	66°7	70°3	70°1	71°0	72°1	70°7	68°4
	7	—	—	—	—	—	—	—	—	—	—	—
	8	41°3	46°1	49°9	53°5	53°7	55°6	56°6	57°0	56°6	56°9	57°4
	9	45°1	52°3	55°7	57°5	57°7	57°9	59°5	62°3	60°3	56°9	57°9
	10	45°8	47°9	50°0	52°4	52°5	53°1	54°4	55°4	54°8	54°4	53°6
	11	46°1	46°1	47°7	49°4	50°2	51°8	51°2	49°3	48°7	48°3	49°8
	12	42°1	44°5	46°2	48°3	50°8	52°3	52°9	53°3	54°3	54°2	54°4
	13	36°3	38°7	40°0	40°1	40°2	42°3	43°8	48°1	45°9	46°1	43°2
	14	—	—	—	—	—	—	—	—	—	—	—
	15	39°9	46°6	52°5	54°1	55°7	57°5	56°0	56°5	54°0	50°6	50°4
	16	49°1	52°5	54°9	56°5	57°9	58°5	58°7	59°7	59°3	57°9	59°3
	17	42°4	52°2	54°0	57°0	58°1	60°7	61°7	62°9	63°7	64°6	65°0
	18	50°8	58°3	59°9	64°4	66°0	67°0	68°9	70°6	72°8	73°2	72°7
	19	56°3	57°9	63°5	66°1	68°7	71°7	71°4	70°7	72°0	69°5	64°9
	20	58°5	58°6	62°8	68°4	69°9	69°6	73°9	68°9	69°5	67°6	65°6
	21	—	—	—	—	—	—	—	—	—	—	—
	22	57°4	55°1	55°9	59°5	61°1	61°4	60°7	61°3	61°5	61°5	60°3
	23	57°1	55°0	55°6	55°2	55°0	55°0	55°2	55°8	56°9	59°5	58°9
	24	53°8	54°4	57°8	60°1	65°0	66°7	69°2	71°7	72°1	73°3	74°1
	25	56°0	57°3	59°7	62°5	66°7	69°4	70°3	70°4	72°3	76°3	78°5
	26	51°9	54°3	56°5	57°5	59°4	61°5	65°6	66°1	67°1	65°3	63°9
	27	50°8	52°8	58°2	61°5	62°3	62°4	62°2	64°9	66°3	66°0	64°8
	28	—	—	—	—	—	—	—	—	—	—	—
	29	59°3	63°3	62°5	64°0	69°4	64°1	69°6	72°1	71°5	73°3	70°9
	30	54°0	59°1	63°3	63°7	64°4	66°3	67°2	67°6	61°9	59°2	57°6
	31	43°8	45°5	46°1	48°8	50°7	52°5	54°0	54°9	55°1	55°6	56°7
Hourly Means	48°84	52°01	54°57	57°17	58°85	59°87	60°79	61°31	61°20	61°06	60°64	59°82
JUNE.	1	46°6	51°2	53°4	54°9	55°0	58°1	59°8	61°3	60°7	61°3	62°2
	2	48°7	55°1	59°0	61°3	64°0	66°5	67°9	69°6	70°3	69°3	66°4
	3	66°1	65°5	65°5	67°1	67°9	68°1	69°3	69°5	70°9	71°3	70°1
	4	—	—	—	—	—	—	—	—	—	—	—
	5	55°2	59°1	62°9	63°3	64°1	66°6	67°3	69°2	59°9	64°0	68°9
	6	48°1	50°8	51°2	53°0	52°4	53°8	56°3	56°4	56°4	56°7	55°4
	7	47°2	49°6	51°4	53°6	56°2	58°0	60°2	61°6	63°5	63°8	62°1
	8	52°7	56°4	60°4	62°4	64°1	65°2	64°2	64°5	64°1	65°7	68°6
	9	54°8	61°1	61°1	65°6	67°5	69°0	70°9	72°1	73°1	73°3	74°3
	10	60°3	60°7	66°7	66°3	71°5	70°3	70°1	70°6	71°7	79°1	67°7
	11	—	—	—	—	—	—	—	—	—	—	—
	12	48°5	49°7	51°0	52°0	54°6	55°1	56°0	56°3	56°7	56°9	56°8
	13	46°6	48°9	52°0	53°4	56°7	58°3	60°7	61°7	62°5	63°0	62°2
	14	45°0	45°2	49°3	54°2	55°7	61°8	59°3	56°9	61°7	65°5	65°9
	15	61°0	67°4	72°1	74°0	78°2	85°1	88°0	89°5	91°1	92°0	91°0
	16	73°1	75°5	79°4	82°0	84°6	83°4	87°8	83°5	85°1	85°7	81°9
	17	67°1	72°5	76°0	76°9	79°9	82°3	82°7	78°7	76°3	81°9	77°0
	18	—	—	—	—	—	—	—	—	—	—	—
	19	63°9	65°5	70°0	72°7	72°7	74°9	75°3	78°0	73°1	72°5	74°5
	20	62°6	65°5	69°5	72°3	73°9	70°7	71°8	71°5	71°9	71°1	72°5
	21	58°9	62°7	61°5	63°9	66°1	65°1	67°3	68°3	68°3	69°7	71°5
	22	57°2	59°7	67°3	68°9	66°5	67°7	69°1	71°5	69°9	70°1	69°9
	23	61°1	62°0	65°6	64°4	67°5	70°3	71°9	74°8	77°8	73°5	72°9
	24	58°9	61°9	64°8	65°2	68°5	70°3	71°7	72°7	73°1	73°9	73°1
	25	—	—	—	—	—	—	—	—	—	—	—
	26	61°8	69°5	75°1	74°7	77°1	78°6	80°3	81°5	82°1	82°5	81°9
	27	60°1	65°4	70°5	74°3	74°7	74°1	75°7	76°1	77°8	76°6	77°6
	28	69°1	68°0	70°9	71°1	71°9	70°7	70°7	70°7	71°2	72°1	71°7
	29	60°4	64°9	69°3	71°9	72°3	72°1	73°1	73°5	74°5	74°8	75°9
	30	58°7	62°3	67°9	68°8	70°4	73°7	72°9	78°5	77°6	77°2	77°1
Hourly Means	57°45	60°62	63°91	65°82	67°50	68°84	70°01	70°37	70°82	71°67	71°17	69°47

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9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
46°3	47°4	47°4	45°4	45°0	41°8	40°4	39°6	38°9	38°5	37°5	36°9	37°0	36°8	37°1	42°74
53°1	53°1	54°1	52°9	49°3	45°7	43°4	41°4	39°5	47°3	47°7	45°0	41°0	39°1	41°0	47°41
64°1	63°7	64°6	57°7	53°6	49°7	47°1	45°2	43°3	44°4	43°5	43°4	43°5	41°0	39°7	52°31
54°0	52°0	51°4	53°0	54°0	54°8	54°2	54°6	54°7	53°4	52°6	52°4	51°2	50°4	47°6	53°36
69°7	70°0	62°3	60°7	57°4	62°9	62°1	56°2	56°6	55°7	55°4	50°4	49°3	48°3	47°5	60°50
70°7	68°4	68°3	61°3	62°6	62°4	62°5	61°3	60°1	—	—	—	—	—	—	58°71
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56°9	57°4	56°9	53°6	51°4	49°7	49°5	51°2	52°6	51°7	46°3	39°6	37°1	38°7	39°3	50°63
56°9	57°9	56°3	53°4	52°9	50°6	49°3	48°9	47°5	44°9	42°8	44°2	41°4	40°6	41°5	52°11
54°8	54°4	53°6	51°8	52°2	51°0	49°6	48°6	48°7	48°2	47°4	47°1	46°5	46°4	46°4	50°45
48°3	49°8	50°8	51°2	50°8	49°8	48°9	48°1	47°1	46°0	45°8	44°0	43°2	42°1	41°7	47°84
54°2	54°2	54°4	52°1	48°5	44°5	41°2	40°6	38°7	37°7	33°5	33°9	35°3	31°8	33°7	44°96
46°1	43°2	41°2	39°6	40°6	41°2	41°5	42°1	41°9	—	—	—	—	—	—	40°51
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50°6	50°4	47°9	47°7	47°1	45°5	45°7	45°1	46°1	42°3	38°7	36°3	33°6	34°1	31°5	49°17
57°9	59°3	57°0	53°6	53°0	50°1	51°9	48°5	47°3	45°0	42°2	39°1	39°0	37°4	38°9	51°22
64°6	65°0	62°8	59°2	56°2	54°4	51°6	49°5	48°3	49°3	47°3	46°9	45°0	44°4	44°2	54°23
73°2	72°7	71°6	69°7	65°0	60°2	57°5	56°3	52°6	51°5	50°1	49°7	49°7	49°7	51°0	60°80
69°5	64°9	66°5	66°5	60°9	56°5	57°9	58°8	58°4	57°5	57°0	57°0	56°5	55°4	56°2	62°42
67°6	65°6	66°4	66°6	65°9	62°9	56°5	57°5	59°3	—	—	—	—	—	—	63°43
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61°5	60°3	62°1	59°1	56°5	53°6	53°3	53°8	54°7	52°3	59°7	59°2	59°1	58°9	58°3	57°19
59°5	58°9	59°9	58°8	57°0	56°9	57°7	58°2	57°5	55°5	54°8	55°9	55°6	56°3	55°8	56°63
73°3	74°1	67°8	65°3	63°5	60°5	57°5	57°1	56°3	56°2	52°8	52°2	51°0	50°6	53°6	60°94
76°3	78°5	73°5	69°9	65°9	62°3	56°9	55°8	55°2	53°1	52°4	50°6	48°1	47°5	46°4	61°54
65°3	63°9	64°6	64°4	60°3	55°0	53°4	52°0	49°9	49°1	48°7	47°1	47°1	47°0	47°0	56°48
66°0	66°9	64°8	66°3	62°1	55°8	52°7	52°5	53°0	—	—	—	—	—	—	58°66
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
73°3	70°9	75°5	75°9	71°3	67°9	62°7	59°5	56°6	54°5	54°2	53°4	51°4	49°5	48°1	63°35
59°2	57°6	55°7	54°0	52°0	49°4	49°0	49°3	48°9	46°7	43°7	45°3	44°8	42°6	42°0	54°57
55°6	56°7	57°3	55°6	55°0	49°5	47°5	44°1	45°3	46°3	43°0	41°2	—	—	—	48°70
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61°06	60°61	59°52	58°05	55°85	53°50	51°91	50°96	50°33	49°17	47°85	47°09	46°21	45°51	45°62	54°10
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61°3	62°2	64°1	59°8	59°1	51°2	47°1	47°3	47°0	44°6	45°0	43°8	44°5	42°8	42°6	52°68
69°3	66°4	68°0	66°9	64°6	62°1	59°7	60°8	63°1	61°7	60°8	58°4	59°4	61°1	63°7	62°85
71°3	70°1	68°9	67°3	64°1	62°7	60°9	59°5	57°3	—	—	—	—	—	—	64°18
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64°0	68°9	62°6	56°8	57°5	54°9	54°4	51°6	50°4	50°1	46°3	46°5	45°0	41°9	46°7	56°63
56°7	56°7	55°4	54°6	52°4	51°4	50°8	46°9	44°8	43°8	42°8	42°2	41°0	41°4	41°6	50°04
63°8	62°1	62°3	61°9	58°9	56°3	55°6	53°0	52°6	52°0	50°4	48°1	48°9	48°1	48°5	55°08
65°7	68°6	63°3	59°3	58°9	57°1	56°9	56°3	54°6	51°3	51°5	50°6	49°3	48°0	49°5	58°25
73°3	74°3	71°1	68°0	65°7	66°3	66°1	65°3	64°4	63°3	62°5	61°7	58°1	57°3	57°7	65°43
79°1	67°7	70°5	70°5	69°5	64°8	62°5	57°9	55°4	—	—	—	—	—	—	61°98
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56°9	56°8	56°3	55°2	52°6	49°9	45°3	43°6	45°5	41°0	48°3	47°0	45°3	44°1	41°0	49°64
63°0	62°2	61°3	59°1	56°2	55°0	52°0	50°8	45°7	45°5	43°3	42°2	42°2	42°4	43°4	52°47
65°5	65°9	64°4	65°0	63°5	58°3	55°8	54°0	53°4	52°5	52°2	50°1	48°3	51°4	52°0	55°89
92°0	91°0	90°5	87°6	84°7	76°0	71°7	70°3	69°5	69°3	71°5	72°7	70°5	70°7	68°5	77°66
85°7	81°9	82°7	87°6	79°5	77°4	69°4	68°9	68°1	66°8	63°2	63°1	61°3	59°5	59°8	75°47
81°9	77°0	79°9	74°9	70°7	67°5	68°2	66°3	66°3	—	—	—	—	—	—	71°68
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
72°5	74°5	72°3	70°8	68°7	66°1	64°8	65°2	65°5	65°3	62°9	63°1	63°9	61°3	60°8	68°22
71°1	72°5	60°7	64°1	63°1	62°1	61°1	60°3	58°4	57°3	56°3	53°6	52°6	54°6	54°1	63°82
69°7	71°5	70°6	69°8	67°3	63°1	62°5	57°3	55°2	52°8	53°2	53°4	52°6	52°6	53°7	61°97
70°1	69°9	65°3	63°3	61°6	62°0	61°8	61°3	59°3	59°1	57°5	59°7	59°5	61°1	61°5	63°93
73°5	72°9	68°0	67°5	64°8	61°5	60°3	58°1	57°5	57°3	57°5	57°1	56°4	55°5	55°4	64°03
73°9	73°1	72°7	70°3	67°0	60°8	58°5	54°0	52°2	—	—	—	—	—	—	64°04
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
82°5	81°9	80°5	73°2	68°5	64°8	62°9	62°8	63°6	61°3	58°8	56°7	56°3	56°5	58°3	69°76
76°6	77°6	72°6	71°4	73°4	70°1	67°3	66°7	64°6	64°4	66°3	65°9	65°7	66°3	68°9	70°27
72°1	71°7	71°1	70°3	69°3	67°3	64°1	62°9	61°1	57°7	56°5	55°8	55°2	54°0	54°3	65°74
74°8	75°9	73°3	70°9	67°8	64°8	58°1	57°0	56°0	54°6	53°4	51°9	50°4	52°4	55°4	64°53
77°2	77°1	77°8	74°1	71°7	70°1	70°3	68°7	68°4	64°9	63°1	62°3	61°5	57°9	53°3	68°72
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
71°67	71°17	69°47	67°77	65°54	62°45	60°23	58°72	57°69	56°73	55°73	54°95	54°07	53°68	54°04	62°88

WET THERMOMETER.												
Hours of Mean Greeting Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	1	26°1	27°3	27°7	29°4	30°8	31°7	30°1	29°9	30°7	32°2	32°6
	2	36°4	37°3	37°5	36°6	38°6	36°9	35°8	36°2	35°8	35°4	34°8
	3	28°8	28°9	29°3	29°3	30°4	32°1	31°9	32°2	32°2	33°0	33°7
	4	—	—	—	—	—	—	—	—	—	—	—
	5	27°7	27°5	27°1	29°5	31°6	31°0	32°3	33°4	33°0	33°4	33°5
	6	25°9	29°6	30°3	31°4	32°0	32°2	33°5	33°0	33°0	32°4	31°7
	7	34°2	34°6	34°8	35°5	35°9	36°1	36°2	36°1	36°1	36°5	35°6
	8	33°0	32°6	32°3	32°4	32°2	32°0	31°3	31°4	32°3	31°5	31°8
	9	27°6	27°4	26°5	26°7	25°7	25°9	25°2	26°5	27°5	28°1	28°8
	10	27°7	28°7	28°7	29°2	29°2	28°8	29°2	30°4	31°0	29°3	28°0
	11	—	—	—	—	—	—	—	—	—	—	—
	12	23°9	23°6	23°7	23°0	22°4	23°0	24°3	24°1	24°1	23°2	22°0
	13	9°1	9°1	11°1	12°4	16°9	18°7	20°7	21°0	21°6	21°5	20°9
	14	26°3	26°3	26°7	27°9	28°5	30°6	30°9	31°5	31°6	32°4	32°0
	15	17°8	24°1	27°9	30°8	32°0	32°1	34°5	36°2	36°5	37°2	36°2
	16	29°2	29°4	29°3	29°7	29°7	29°2	27°9	26°3	25°9	24°5	23°9
	17	10°1	9°5	8°0	7°2	8°6	8°7	8°8	8°7	8°9	10°2	8°5
	18	—	—	—	—	—	—	—	—	—	—	—
	19	5°5	4°7	4°5	7°4	9°3	12°1	12°6	12°6	13°4	14°1	14°6
	20	8°7	8°8	8°8	10°1	14°0	14°3	16°6	19°0	20°5	21°5	21°4
	21	21°1	21°4	21°5	21°4	21°1	21°8	21°8	22°8	24°1	24°6	24°8
	22	1°3	2°1	1°3	2°8	5°4	8°8	12°2	15°6	16°1	16°6	16°2
	23	5°8	5°3	4°5	9°0	12°8	16°3	18°0	17°8	19°4	19°9	20°8
	24	18°8	17°8	19°4	21°1	24°0	26°5	29°2	29°8	31°4	32°2	32°3
	25	—	—	—	—	—	—	—	—	—	—	—
	26	33°7	34°1	34°4	35°3	38°1	38°1	36°9	37°1	37°2	37°2	36°3
	27	17°1	14°9	14°4	15°9	16°9	18°5	20°5	21°1	21°4	21°9	21°6
	28	29°8	30°8	31°2	31°5	32°1	33°9	34°1	34°3	34°8	34°4	34°6
	29	32°5	32°5	33°0	33°3	33°3	34°0	34°9	34°3	34°2	34°3	34°5
	30	37°2	37°2	36°2	37°7	38°7	38°5	39°2	40°6	40°5	40°2	40°3
	31	16°4	13°9	12°1	10°7	10°7	13°2	14°3	14°3	16°8	17°7	16°2
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	22°56	22°78	22°96	23°98	25°19	26°11	26°77	27°27	27°78	27°98	27°69	27°06
FEBRUARY.	2	18°3	20°6	20°5	22°2	24°5	26°1	27°5	27°9	27°8	27°6	27°9
	3	29°3	30°5	31°6	34°3	35°1	36°2	37°2	37°9	38°7	38°1	37°2
	4	28°2	25°3	26°1	26°4	28°1	29°6	30°7	31°4	32°0	32°0	31°8
	5	31°6	32°5	33°0	34°9	34°5	32°5	32°4	33°3	32°9	32°2	32°0
	6	22°8	23°5	25°9	27°5	32°0	32°2	35°3	35°0	35°2	35°4	34°9
	7	24°9	24°5	24°4	31°8	34°4	37°1	37°1	36°9	36°4	35°2	36°2
	8	—	—	—	—	—	—	—	—	—	—	—
	9	15°0	11°3	10°6	10°0	10°1	10°0	10°7	11°2	12°6	11°8	12°6
	10	2°5	3°5	4°1	8°5	12°4	14°9	20°3	20°3	20°6	22°0	22°4
	11	20°8	22°6	19°2	17°8	18°3	17°4	17°7	17°8	18°7	18°0	17°3
	12	3°4	—	—	—	—	12°0	16°0	17°7	20°7	20°5	20°0
	13	23°2	23°6	25°2	27°3	28°4	28°8	29°6	30°0	31°0	31°5	33°3
	14	15°1	18°3	20°9	23°2	26°5	30°4	31°7	31°6	31°6	31°9	31°0
	15	—	—	—	—	—	—	—	—	—	—	—
	16	20°1	20°4	20°8	21°1	24°1	25°1	24°8	25°2	25°1	24°8	24°5
	17	18°0	18°7	19°9	23°0	25°3	27°4	28°8	28°5	28°4	29°7	28°4
	18	10°7	10°5	14°7	16°0	21°5	21°3	22°4	23°5	23°7	24°6	24°3
	19	6°6	10°7	10°7	17°7	24°3	24°3	25°9	25°3	25°3	24°3	24°6
	20	24°1	24°3	24°9	25°7	25°9	26°0	25°6	26°4	27°4	29°8	28°8
	21	24°3	24°9	26°1	26°7	27°9	28°3	29°5	28°8	27°1	27°9	25°9
	22	—	—	—	—	—	—	—	—	—	—	—
	23	12°0	14°6	15°6	20°2	21°8	22°2	23°2	22°7	23°1	23°1	21°9
	24	11°2	10°2	12°1	14°8	16°8	17°2	21°3	22°0	18°7	18°3	16°8
	25	0°9	1°4	3°2	7°6	10°2	14°0	15°1	14°6	15°4	15°6	14°2
	26	—	—	—	—	—	2°8	4°4	5°5	6°9	6°0	4°5
	27	—	—	—	1°4	5°0	—	12°9	14°0	14°4	13°8	13°5
	28	10°3	10°6	11°1	13°9	15°6	17°2	17°4	17°0	16°9	17°4	17°5
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	16°58	18°21	19°08	20°55	22°85	22°63	24°06	24°35	24°61	24°65	24°23	23°36

WET THERMOMETER.															
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
32°2	32°6	33°8	34°0	34°4	34°6	34°8	34°8	34°5	34°7	35°0	35°4	35°6	36°2	36°2	32°60
35°4	34°8	34°8	34°8	33°0	32°0	31°5	30°4	30°3	27°9	26°6	26°5	27°1	26°6	27°3	32°92
33°0	33°7	32°0	31°5	30°6	30°3	29°9	29°7	28°8	—	—	—	—	—	—	30°84
33°4	33°5	32°0	29°5	27°6	27°2	28°3	28°3	27°5	32°4	32°5	32°6	31°0	30°9	26°2	28°72
32°4	31°7	32°0	32°5	33°0	33°4	32°8	32°5	32°5	32°8	33°0	33°3	34°3	34°2	33°4	32°28
36°5	35°6	34°7	34°4	34°3	35°1	34°8	34°5	34°8	34°6	35°1	34°9	34°3	33°1	33°0	34°97
31°5	31°8	31°5	32°0	30°7	29°8	29°5	29°6	29°6	28°6	28°7	28°1	28°0	27°7	27°6	30°59
28°1	28°8	29°4	30°1	29°7	28°8	28°2	26°8	27°3	27°3	27°9	27°8	28°2	29°3	29°2	27°75
29°3	28°0	27°9	28°1	27°9	28°8	29°6	30°0	29°2	—	—	—	—	—	—	28°01
—	—	—	20°5	19°9	19°6	18°7	16°3	15°6	26°3	25°5	25°1	24°6	24°5	24°5	19°37
23°2	22°0	21°6	18°3	15°4	20°4	20°9	21°1	21°3	14°2	13°8	13°1	12°7	11°5	10°0	19°46
21°5	20°9	19°5	29°5	24°9	24°3	28°3	27°5	27°3	22°8	23°0	23°8	24°9	25°4	27°2	26°65
32°4	32°0	29°9	36°6	35°9	36°6	35°4	36°2	35°2	24°6	19°9	21°5	19°4	19°0	18°8	22°48
37°2	36°2	36°2	22°8	22°6	21°7	20°6	19°5	17°9	34°9	34°6	32°6	31°6	31°0	29°5	32°98
24°5	23°9	23°6	6°3	6°8	6°3	6°4	5°4	3°2	17°2	15°9	14°4	14°4	12°4	11°5	22°48
10°2	8°5	7°0	—	—	—	—	—	—	—	—	—	—	—	—	7°53
—	—	—	11°1	9°8	9°2	8°3	7°1	6°0	9°3	7°7	7°1	6°4	6°1	5°6	8°91
14°1	14°6	13°1	21°1	21°7	21°7	22°2	22°9	22°9	5°3	5°3	6°3	6°4	7°1	8°0	18°50
21°5	21°4	21°1	22°5	21°0	18°8	16°8	13°2	11°5	20°9	21°1	21°1	21°1	21°4	20°9	16°42
24°6	24°8	24°1	13°7	13°0	12°6	12°3	12°1	12°0	8°8	6°2	3°7	1°2	0°8	0°9	9°15
16°6	16°2	14°8	19°1	17°9	17°0	15°9	15°0	14°1	11°4	7°6	6°0	3°9	2°2	2°2	14°61
19°9	20°8	19°7	31°2	29°6	29°8	30°5	30°5	31°5	13°0	11°1	11°1	15°4	15°7	16°0	28°67
32°2	32°3	32°2	—	—	—	—	—	—	32°1	31°2	30°9	30°8	31°9	33°4	31°62
37°2	36°3	34°6	33°3	32°5	31°8	30°3	29°8	28°5	27°6	27°4	25°3	21°8	19°8	17°8	22°67
21°9	21°6	21°1	20°9	23°8	26°0	25°5	26°7	27°6	27°7	27°5	27°6	27°7	28°2	29°6	32°50
34°4	34°6	33°4	33°3	32°5	32°6	33°2	32°9	32°4	31°6	31°0	31°0	31°2	31°4	32°0	34°94
34°3	34°5	34°5	35°1	35°6	35°6	36°1	36°2	36°2	35°9	37°1	36°0	36°7	36°1	36°7	35°61
40°2	40°3	39°9	39°7	39°4	40°7	39°6	37°2	35°6	34°4	30°5	27°8	24°3	20°6	18°6	14°13
17°7	16°3	16°2	14°8	13°5	12°8	11°5	10°6	8°9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	16°4	16°9	14°8	15°2	14°8	16°0	—
27°98	27°69	27°06	26°54	25°81	25°83	25°63	25°07	24°53	24°35	23°75	23°09	22°75	22°32	22°07	25°00
27°6	27°9	27°9	27°9	28°6	28°7	30°4	30°6	30°5	29°5	30°0	30°3	30°8	31°0	29°8	27°37
38°1	37°2	36°2	34°4	33°8	33°1	32°7	32°2	32°0	30°3	31°4	28°8	29°2	27°7	27°4	33°14
32°0	31°8	31°6	32°2	33°0	33°4	33°7	34°2	34°7	33°7	33°0	32°8	32°2	32°0	31°5	31°23
32°2	32°0	30°6	30°5	29°4	29°2	30°0	28°6	28°4	28°3	26°6	26°5	26°3	25°9	24°2	30°26
35°4	34°9	34°0	32°7	32°0	31°8	32°0	32°5	30°5	29°5	27°9	26°8	25°7	25°9	24°7	30°24
35°2	36°2	35°8	34°4	29°4	25°3	20°6	18°0	15°9	—	—	—	—	—	—	27°45
—	—	—	—	—	—	—	—	—	20°3	20°2	20°1	20°1	20°1	19°6	8°40
11°8	12°6	10°3	9°2	8°2	7°1	6°8	6°5	6°2	4°3	1°1	4°1	3°4	2°9	2°5	19°12
22°0	22°4	23°0	23°3	23°9	25°3	24°5	25°3	26°3	25°8	21°6	22°0	21°5	20°8	21°1	13°89
18°0	17°3	17°0	16°5	15°2	13°9	12°9	12°6	11°6	10°2	10°3	10°3	2°8	—	2°9	17°87
20°5	20°0	19°4	18°0	17°9	17°3	17°3	17°1	18°5	18°8	2°8	21°3	21°8	22°5	23°2	25°22
31°5	33°3	33°9	28°3	28°9	29°8	28°8	28°6	24°4	19°2	16°3	13°5	13°3	13°5	14°8	25°39
31°9	31°0	30°7	30°3	29°4	27°5	27°5	27°2	26°8	—	—	—	—	—	—	21°77
—	—	—	—	—	—	—	—	—	17°7	18°9	19°8	20°5	20°5	20°3	21°31
24°8	24°5	23°6	22°4	22°4	22°2	21°3	20°9	19°8	17°9	17°7	19°2	19°5	19°9	19°7	14°32
29°7	28°4	26°4	24°5	23°5	22°6	21°8	21°7	20°0	20°0	18°8	16°8	9°9	5°9	3°4	22°68
24°6	24°3	23°5	16°7	12°9	10°3	10°3	10°3	9°9	8°2	6°2	6°8	5°2	5°0	5°0	25°75
24°3	24°6	25°9	25°9	27°3	24°7	24°9	25°5	25°3	25°4	24°9	23°7	23°8	23°7	23°7	22°61
29°8	28°8	27°3	26°3	25°4	23°0	25°1	25°7	25°7	21°5	21°9	21°7	25°4	25°7	25°4	12°77
27°9	25°9	24°9	24°1	23°9	22°2	21°7	19°2	18°1	—	—	—	—	—	—	16°96
—	—	—	—	—	—	—	—	—	16°4	16°7	15°6	15°2	14°6	12°7	10°43
23°1	21°9	18°5	18°7	17°5	15°9	15°0	15°7	13°8	12°2	12°8	12°9	11°4	10°7	11°6	8°54
18°3	16°8	14°8	12°8	9°5	8°0	6°4	4°6	2°3	3°7	5°4	3°5	1°6	—	0°9	3°18
15°6	14°2	13°2	11°4	8°8	6°9	4°1	4°8	4°1	—	—	—	—	—	—	10°67
6°0	4°5	3°4	1°2	—	1°7	—	—	—	—	—	—	—	—	—	14°60
13°8	13°5	11°5	11°4	11°8	10°5	10°5	10°0	10°3	10°3	10°3	10°6	10°6	10°7	10°3	—
17°4	17°5	17°2	15°7	15°4	14°6	14°3	14°2	13°5	—	15°9	13°9	13°5	13°2	12°7	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24°65	24°23	23°36	22°04	21°11	20°07	20°55	20°26	19°51	18°29	18°90	18°35	17°43	16°74	16°30	20°70

WET THERMOMETER.													
Hours of Mean Gutting Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	2	11'4	13'5	16'9	20'7	23'0	21'8	22'7	22'3	24'9	24'5	23'7	23'0
	3	8'5	9'1	12'4	21'3	24'5	26'3	26'6	27'1	27'7	27'9	27'4	25'8
	4	12'9	17'8	24'3	30'3	31'6	32'2	34'7	34'8	35'4	34'9	34'5	34'7
	5	29'7	28'8	30'5	32'0	33'9	34'1	34'3	34'9	35'0	37'0	36'4	39'0
	6	27'1	27'7	28'4	29'4	27'5	27'3	27'9	27'6	27'9	27'3	27'5	26'6
	7	8'8	12'8	17'1	23'7	26'4	27'8	28'6	28'3	28'8	30'3	30'0	29'7
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	31'0	30'7	31'2	32'4	33'9	34'8	34'3	34'2	33'1	33'7	34'1	33'7
	10	27'3	28'3	32'4	34'9	35'4	35'8	35'6	34'9	35'8	35'8	35'0	34'1
	11	25'1	24'4	30'8	—	36'2	35'8	36'2	36'2	35'8	36'2	35'3	36'0
	12	31'8	34'5	35'8	37'4	39'0	39'1	39'4	41'2	40'4	39'1	39'1	39'0
	13	38'1	38'6	37'9	39'5	40'3	41'1	41'9	42'1	42'9	43'5	44'7	43'4
	14	35'2	35'8	37'6	37'5	37'4	38'1	37'0	37'1	36'4	35'8	34'2	32'9
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	27'5	27'3	26'3	27'5	26'1	26'8	25'9	26'8	28'8	30'0	31'0	32'0
	17	23'7	24'0	24'5	24'9	25'4	25'9	27'9	29'4	30'5	31'5	31'3	30'8
	18	21'1	23'4	24'9	28'2	32'0	32'4	33'9	34'9	35'4	34'9	35'6	34'3
	19	33'2	33'9	33'5	37'2	36'9	39'4	39'4	41'9	40'2	39'6	36'0	36'1
	20	26'8	29'6	35'6	37'5	38'5	40'8	40'8	40'5	42'8	42'3	40'3	39'0
	21	29'8	29'3	29'5	28'6	30'5	29'6	29'7	30'8	32'0	33'0	32'2	32'7
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	32'0	33'3	34'6	35'8	36'7	37'4	38'1	38'1	38'3	36'8	37'0	36'7
	24	38'1	38'4	38'7	39'1	39'1	38'4	38'4	38'5	39'0	39'6	38'4	39'0
	25	34'1	38'3	38'5	39'0	39'4	40'2	40'5	41'8	40'5	40'5	39'6	39'0
	26	34'7	34'6	36'0	39'6	40'4	41'1	41'6	40'7	41'9	40'3	37'7	36'5
	27	34'9	36'0	36'9	37'3	40'4	39'7	40'4	39'9	40'8	38'7	38'5	36'5
	28	33'5	33'4	34'7	35'4	35'8	37'7	36'7	36'3	36'7	35'8	35'2	33'9
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	30'5	31'7	32'0	30'0	32'6	32'7	33'9	35'0	35'8	35'3	34'9	34'7
	31	27'9	31'0	32'0	33'9	35'3	38'0	37'3	37'3	37'5	37'9	38'1	39'4
	Hourly Means	28'75	29'85	31'70	33'89	35'13	35'73	36'15	36'54	37'02	36'89	36'31	35'98
APRIL.	1	27'3	30'0	31'7	33'7	35'4	35'4	36'3	36'7	37'2	35'8	36'2	35'8
	2	27'7	30'5	33'9	34'1	34'2	36'5	36'1	35'4	35'3	35'6	34'5	34'3
	3	28'5	32'2	33'9	34'4	36'1	37'2	38'7	37'2	37'4	36'5	36'3	35'8
	4	31'6	34'3	36'7	38'4	38'9	40'3	40'8	41'0	42'1	41'8	42'6	41'4
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	39'6	39'2	39'4	40'9	41'6	46'4	46'5	47'5	47'1	46'5	47'3	47'2
	7	42'1	43'4	44'7	47'0	48'7	49'4	48'4	48'7	49'3	49'3	51'5	49'7
	8	29'6	29'6	31'7	31'0	32'1	34'1	33'0	33'5	33'3	33'7	34'5	33'4
	9	23'5	30'8	32'2	37'1	38'5	37'5	39'0	39'9	40'3	40'3	37'0	34'6
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	38'3	38'3	40'7	49'2	50'0	51'1	49'1	45'3	40'9	39'1	38'7	36'0
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	25'9	26'4	26'6	27'5	28'5	30'3	31'6	32'0	32'4	32'2	32'9	31'4
	14	27'6	32'7	34'5	37'7	39'0	39'0	38'1	38'7	38'7	38'2	38'3	38'5
	15	28'4	27'9	27'9	28'4	32'0	33'5	34'3	34'5	39'4	35'2	35'8	36'2
	16	26'5	31'6	32'7	37'1	38'3	38'3	39'0	39'2	39'7	40'0	37'1	35'6
	17	31'7	38'4	41'7	45'2	46'7	47'2	47'7	48'5	47'5	48'4	48'7	48'1
	18	46'4	46'9	48'5	50'5	47'4	48'2	47'7	50'9	50'1	51'4	51'2	51'7
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	30'0	37'0	41'4	42'1	45'4	47'6	49'7	51'1	52'2	51'9	51'4	50'1
	21	40'3	47'7	50'7	53'2	55'4	57'3	58'3	58'5	59'4	58'3	56'6	54'9
	22	41'4	42'3	42'5	43'1	43'3	43'4	44'7	46'9	47'3	46'7	47'7	45'5
	23	47'2	49'3	50'7	46'5	48'2	48'7	49'7	50'4	50'3	50'4	49'1	51'2
	24	48'2	49'2	49'2	49'2	50'0	51'2	51'4	51'4	52'4	54'1	55'1	55'5
	25	39'4	39'6	39'4	37'2	37'2	38'3	37'4	38'1	40'1	38'7	38'2	36'5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	37'1	41'9	42'5	46'5	47'2	47'0	46'9	46'5	46'5	47'1	48'3	48'3
	28	40'3	43'8	44'4	44'2	44'1	45'0	45'3	46'2	48'3	49'4	50'5	49'7
	29	44'6	44'6	44'6	46'4	47'4	47'1	48'2	47'2	46'8	47'2	46'7	48'1
	30	47'7	48'5	49'4	48'1	48'0	50'7	52'3	53'7	55'3	52'5	53'4	52'7
	Hourly Means	35'64	38'24	39'66	41'17	42'28	43'23	43'61	44'08	44'37	44'01	43'98	43'37

* Good Friday.

			WET THERMOMETER.												Daily and Monthly Means.
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
24.5	23.7	23.0	19.5	14.6	14.0	11.5	11.4	8.4	7.8	7.4	7.7	9.2	7.1	9.2	15.68
27.9	27.4	25.8	24.4	21.5	18.0	16.7	16.9	16.4	20.9	20.1	19.9	17.7	15.6	14.5	20.34
34.9	34.5	34.7	35.1	35.1	34.6	35.7	33.7	33.1	30.3	32.8	31.6	31.3	32.4	31.0	31.37
37.0	36.4	39.0	35.8	33.2	32.3	26.3	27.3	25.4	23.6	25.6	26.1	27.7	28.4	28.2	31.10
27.3	27.5	26.6	23.2	19.6	16.1	14.7	12.1	12.3	9.8	10.1	9.0	8.6	9.0	8.3	20.21
30.3	30.0	29.7	29.4	29.4	29.4	30.1	29.8	29.0	—	—	—	—	—	—	27.38
33.7	34.1	33.7	32.9	29.6	27.7	29.5	30.6	31.0	31.7	32.2	31.7	30.8	30.5	30.8	31.90
35.8	35.0	34.1	32.0	27.9	26.3	26.3	25.7	25.2	24.5	25.3	25.6	25.9	25.1	24.6	29.98
36.2	35.3	36.0	34.5	32.8	31.8	31.6	31.8	31.6	30.8	30.3	29.7	29.6	30.4	30.6	32.30
39.1	39.1	39.0	39.0	39.0	37.7	38.5	39.9	40.1	39.7	39.7	40.2	40.3	38.4	38.1	38.60
43.5	44.7	43.4	40.9	39.4	37.4	37.2	36.9	36.9	37.2	36.1	35.3	35.3	34.8	36.0	39.05
35.8	34.2	32.9	32.0	30.0	29.3	28.8	28.6	28.6	—	—	—	—	—	—	32.92
30.0	31.0	32.0	28.4	26.4	25.9	24.6	23.5	23.2	23.9	23.9	23.5	23.0	22.6	23.7	26.19
31.5	31.3	30.8	31.0	26.8	25.6	24.5	23.3	22.4	21.1	20.5	19.8	18.7	19.4	19.4	25.09
34.9	35.6	34.3	32.4	30.7	29.5	30.5	30.4	29.6	29.4	31.5	31.0	32.0	32.0	32.8	30.95
39.6	36.0	36.1	35.3	33.7	32.1	31.4	29.5	28.4	28.4	29.6	29.6	28.3	28.1	28.6	33.76
42.3	40.3	39.0	37.3	36.5	37.5	36.7	36.4	34.5	33.3	32.7	32.4	31.2	30.8	30.6	36.02
33.0	32.2	32.7	31.7	30.7	28.8	26.3	24.9	25.4	—	—	—	—	—	—	30.23
36.8	37.0	36.7	37.8	36.5	34.5	36.6	37.1	37.7	31.8	31.6	31.6	32.0	31.6	31.4	36.73
39.6	38.4	39.0	39.0	38.9	40.0	40.4	40.0	39.0	38.3	38.0	37.4	37.5	37.9	37.7	38.70
40.5	39.6	39.0	39.0	38.9	39.2	37.3	36.7	36.3	35.8	35.5	35.2	34.7	34.4	34.3	38.03
40.3	37.7	36.5	36.9	36.1	35.8	35.3	35.3	35.5	35.4	35.4	35.5	35.3	35.1	35.2	37.14
38.7	38.5	36.5	37.1	36.9	36.8	36.3	35.6	36.2	35.8	34.6	34.2	33.4	33.4	33.5	36.82
35.8	35.2	33.9	33.6	33.3	32.6	32.8	32.6	32.6	—	—	—	—	—	—	33.20
35.3	34.9	34.7	35.9	33.1	31.8	29.8	28.2	28.1	28.3	29.3	29.2	28.6	29.5	29.4	32.05
37.9	38.1	39.4	36.5	32.7	32.3	30.5	29.4	27.9	27.3	26.1	25.9	26.4	26.6	26.6	32.24
36.89	36.31	35.98	34.65	32.93	31.88	31.12	30.70	30.19	30.31	30.41	30.06	29.88	29.66	29.60	32.72
35.8	36.2	35.8	35.1	29.8	28.3	26.6	26.3	26.5	26.4	25.9	25.1	24.9	24.6	25.3	30.68
35.6	34.5	34.3	32.9	29.5	27.8	28.2	27.6	26.6	27.0	27.3	27.1	27.5	27.4	26.4	30.97
36.5	36.3	35.8	35.7	30.7	29.4	29.2	30.6	31.6	32.4	30.7	29.3	27.9	30.5	30.5	33.03
41.8	42.6	41.4	39.7	38.8	38.1	37.9	37.6	37.4	—	—	—	—	—	—	40.28
46.5	47.3	47.2	46.4	45.8	45.6	44.8	45.2	44.4	46.3	45.8	45.4	45.5	43.6	40.8	41.17
49.3	51.5	49.7	49.7	48.9	48.2	46.0	44.6	41.5	43.7	43.6	43.3	42.3	41.8	40.9	41.28
53.7	54.5	53.4	52.2	51.0	50.0	48.8	47.2	47.1	40.6	38.1	36.0	33.3	32.3	31.4	29.81
40.3	37.0	34.6	33.7	32.5	33.8	32.2	31.4	31.6	26.5	25.4	24.7	24.5	24.7	23.5	35.79
59.1	38.7	36.0	31.1	33.4	33.3	32.4	32.0	31.4	38.8	39.4	38.9	39.0	39.0	38.1	36.11
32.2	32.9	31.4	32.0	30.8	26.6	25.9	25.5	26.5	25.4	25.6	25.4	25.6	25.3	26.1	27.56
38.2	38.3	38.5	38.6	37.1	36.2	36.3	35.2	35.1	26.4	26.6	25.9	27.1	27.3	27.2	31.86
35.2	35.8	36.2	35.6	32.6	29.6	27.6	26.8	26.8	33.3	29.8	28.5	28.8	28.3	28.4	30.43
40.0	37.1	35.6	35.8	36.9	36.5	37.3	36.5	37.3	26.4	—	25.9	25.4	25.4	24.4	36.14
48.4	48.7	48.1	47.9	46.9	45.2	42.5	41.0	40.9	36.5	36.9	—	36.2	33.9	32.3	43.87
51.4	51.2	51.7	47.4	46.2	45.5	45.8	42.9	39.4	39.6	38.5	40.2	40.1	43.2	47.1	43.25
51.9	51.4	50.1	48.7	48.1	48.0	47.7	46.2	42.9	31.0	31.4	30.7	29.6	28.8	28.4	45.15
58.3	56.6	54.9	53.4	52.1	50.5	50.1	50.1	50.1	42.4	43.4	41.8	40.9	41.4	41.6	51.30
46.7	47.7	45.5	44.1	42.8	41.9	42.5	42.6	43.5	49.3	49.1	49.3	43.6	41.8	41.2	44.29
50.4	49.1	51.2	49.7	48.7	48.5	48.1	48.7	49.0	44.7	45.1	44.4	44.4	46.5	45.8	48.65
54.1	55.1	55.5	54.2	47.3	45.5	45.8	47.4	48.5	47.7	47.4	46.9	46.5	46.2	48.5	49.73
38.7	38.2	36.5	38.5	38.5	38.5	38.5	38.8	38.6	48.3	49.4	49.4	48.9	47.2	41.6	37.70
47.1	48.3	48.3	—	—	—	—	—	—	35.4	36.2	35.3	35.1	34.9	34.5	42.15
49.4	50.5	49.7	47.5	43.7	39.8	39.2	38.5	38.5	38.5	38.1	36.7	36.0	34.9	34.4	45.68
47.2	46.7	48.1	48.1	47.0	44.2	46.5	43.1	42.9	43.5	45.0	47.0	47.4	47.1	46.4	46.69
52.5	53.4	52.7	52.4	51.0	50.1	49.7	50.1	49.7	45.8	46.3	46.0	46.5	46.5	47.0	50.67
44.01	43.98	43.37	42.46	40.73	39.53	38.93	38.49	38.16	37.82	38.11	37.23	36.68	36.54	36.09	40.19

WET THERMOMETER.												
Hours of Mean Gettungen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	51°3	51°7	52°2	51°7	52°2	52°3	52°4	52°7	52°5	51°4	51°4
	2	49°6	50°7	52°4	53°4	56°3	56°8	54°6	55°5	55°5	55°1	54°4
	3	—	—	—	—	—	—	—	—	—	—	—
	4	40°3	48°5	53°8	53°8	55°5	54°4	56°1	54°8	55°5	55°6	57°1
	5	44°0	47°7	52°0	55°0	51°7	50°3	53°6	55°5	58°0	58°8	58°0
	6	51°5	49°4	48°4	48°6	47°1	46°4	45°3	45°6	45°2	47°2	46°9
	7	41°8	44°2	44°7	45°6	47°1	49°3	51°1	52°0	50°9	51°2	52°3
	8	49°7	52°7	53°8	55°0	54°8	55°6	55°3	56°1	56°0	53°7	53°6
	9	54°0	54°3	55°0	54°3	54°1	53°9	54°3	55°2	55°2	55°2	55°8
	10	—	—	—	—	—	—	—	—	—	—	—
	11	31°2	30°9	30°9	32°4	33°3	35°1	36°5	35°4	37°5	39°7	39°1
	12	39°2	41°2	42°7	45°5	46°2	47°7	52°7	52°2	53°3	53°1	53°7
	13	41°8	44°6	45°8	45°7	51°7	54°8	56°9	57°7	57°6	58°8	59°0
	14	53°6	56°9	58°3	60°9	61°5	59°4	59°7	60°2	60°4	58°0	61°6
	15	50°2	49°9	48°9	50°3	52°0	51°9	54°0	57°9	55°6	57°9	59°4
	16	44°8	47°5	51°9	55°4	55°8	57°7	57°1	57°6	57°0	56°4	57°3
	17	—	—	—	—	—	—	—	—	—	—	—
	18	51°9	51°3	48°5	48°9	48°4	47°2	46°9	43°0	43°5	43°9	43°1
	19	36°0	38°0	39°2	39°4	41°7	45°0	44°6	45°8	46°9	48°1	48°1
	20	40°3	43°3	45°6	48°2	49°9	50°7	50°9	50°4	53°4	50°9	50°5
	21	37°7	38°5	40°6	41°2	41°9	42°1	43°3	43°4	44°6	45°0	44°6
	22	39°2	42°9	44°5	47°9	49°0	50°5	48°3	48°7	48°5	46°7	48°1
	23	49°0	52°5	54°6	56°8	59°5	59°0	63°1	64°1	64°2	61°9	61°3
	24	—	—	—	—	—	—	—	—	—	—	—
	25	59°9	62°9	65°3	66°8	67°2	66°2	68°5	69°0	70°0	68°1	66°8
	26	63°3	64°1	67°2	68°4	67°7	67°6	69°4	71°9	70°3	69°2	67°9
	27	64°1	67°6	67°7	66°9	66°2	66°7	66°3	65°5	65°5	65°3	65°9
	28	57°9	60°2	61°3	63°1	66°1	64°0	63°9	67°6	66°1	63°8	63°1
	29	54°9	58°7	60°2	62°6	65°1	62°9	64°4	64°1	64°1	63°5	62°5
	30	58°3	57°3	59°7	61°6	67°4	68°4	69°1	69°3	68°1	67°7	67°0
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	18°29	50°29	51°74	53°28	54°33	54°51	55°43	55°81	56°02	55°63	55°72	55°22
JUNE.	1	58°8	62°1	62°8	61°9	61°4	63°7	66°1	66°6	66°6	65°9	67°4
	2	62°5	61°9	63°4	65°9	64°5	64°5	60°2	62°7	62°5	61°2	68°5
	3	55°2	57°5	58°7	61°4	61°2	62°3	59°2	59°0	59°9	62°8	62°7
	4	59°7	62°7	62°2	62°5	63°0	62°3	64°3	65°4	62°9	58°3	58°5
	5	52°9	52°4	52°7	53°0	52°9	52°5	53°1	54°2	54°6	58°5	55°9
	6	42°5	45°8	47°7	48°9	49°7	49°8	50°3	49°4	50°7	50°0	50°5
	7	—	—	—	—	—	—	—	—	—	—	—
	8	46°1	48°7	54°2	55°2	55°5	57°8	57°8	58°3	57°5	57°9	59°4
	9	46°4	50°5	55°0	49°8	60°2	58°5	58°3	59°1	60°0	61°1	61°5
	10	50°3	53°7	58°7	57°1	59°5	63°8	65°7	65°9	65°7	67°2	66°8
	11	53°9	58°0	59°6	62°5	63°5	62°6	60°9	59°1	59°8	61°5	61°9
	12	46°3	47°2	48°2	50°5	54°3	53°0	52°7	52°9	53°2	53°3	54°3
	13	54°8	57°4	57°5	59°4	59°9	59°7	58°8	57°9	59°7	58°7	56°6
	14	—	—	—	—	—	—	—	—	—	—	—
	15	58°7	60°2	61°1	64°7	68°4	67°7	69°4	68°4	68°2	65°9	67°5
	16	56°3	57°7	58°9	60°4	61°6	60°2	62°6	62°8	62°7	62°8	63°9
	17	53°2	57°7	60°9	64°1	64°5	64°9	67°2	68°1	68°1	69°1	67°5
	18	60°2	61°8	62°1	66°8	70°2	70°1	71°3	73°2	70°8	67°7	74°0
	19	66°4	67°4	66°7	67°9	68°8	72°1	72°1	70°2	69°1	66°5	65°1
	20	55°5	55°7	55°7	56°2	56°9	56°0	55°4	55°2	55°0	54°2	53°6
	21	—	—	—	—	—	—	—	—	—	—	—
	22	50°2	50°7	52°9	53°5	55°3	54°6	55°0	54°8	53°5	54°6	54°9
	23	51°4	54°3	55°3	57°0	59°1	59°3	57°5	59°9	60°4	59°9	60°1
	24	53°4	58°4	56°9	57°8	59°3	59°7	59°7	60°8	59°9	63°6	58°9
	25	55°3	56°4	60°0	62°4	61°8	63°5	63°7	65°4	69°1	68°1	37°9
	26	57°5	58°0	60°6	61°5	64°3	65°4	65°1	64°8	66°9	66°9	67°9
	27	60°4	64°6	63°1	62°9	62°9	64°9	65°4	64°9	62°2	62°1	63°6
	28	—	—	—	—	—	—	—	—	—	—	—
	29	64°1	63°8	64°7	65°7	68°3	68°7	68°9	69°1	69°2	69°9	69°8
	30	65°6	67°2	68°1	69°1	70°1	69°8	69°5	69°2	70°3	68°3	68°8
Hourly Means	55°29	57°38	58°76	59°93	61°43	61°81	61°93	62°20	62°26	62°20	62°39	62°50

			WET THERMOMETER.												Daily and Monthly Means.
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
51.4	51.4	52.3	52.1	51.7	51.7	52.3	53.5	51.5	51.1	50.7	50.7	50.9	50.9	50.2	51.72
55.1	55.1	54.4	55.6	52.7	49.1	47.0	46.0	47.4	—	—	—	—	—	—	49.41
55.6	57.1	53.8	51.3	51.6	49.7	47.1	45.8	44.1	43.8	41.7	39.8	39.2	38.9	38.5	48.98
58.8	58.0	56.0	55.7	53.7	52.4	50.0	50.0	50.2	50.7	48.6	48.6	48.6	48.1	51.2	52.02
47.2	46.9	47.4	46.2	44.9	42.5	41.8	41.8	40.0	40.0	40.9	40.2	38.2	38.1	36.7	44.18
51.2	52.3	52.3	52.5	51.5	50.5	48.3	47.0	45.6	46.3	46.8	46.7	47.9	47.0	48.3	48.37
53.7	53.6	53.5	54.6	54.0	53.1	53.0	54.1	54.1	54.1	54.3	53.8	53.8	52.9	55.6	53.97
55.2	55.8	56.0	56.6	57.1	57.5	57.8	57.8	57.9	—	—	—	—	—	—	50.09
39.7	39.1	39.0	39.4	39.4	36.2	37.3	36.5	36.3	36.3	37.2	37.2	37.2	37.1	39.0	36.25
53.1	53.7	54.2	52.1	48.5	44.0	42.7	41.0	39.2	39.0	36.3	36.5	37.5	39.8	40.6	44.95
59.0	59.0	59.7	59.9	55.2	54.0	52.5	56.2	58.2	57.2	58.7	57.3	56.4	54.1	53.6	55.03
58.0	61.6	59.1	56.6	56.4	56.9	56.9	56.1	55.6	60.6	60.4	60.7	56.2	56.1	51.3	58.06
57.9	59.4	57.2	51.2	49.9	48.7	47.1	46.7	46.6	44.8	44.3	44.1	43.7	43.4	43.1	49.95
56.4	57.3	55.5	55.4	53.7	50.9	48.3	47.5	47.7	—	—	—	—	—	—	53.14
43.9	43.1	41.6	40.6	38.3	37.4	36.9	35.8	35.6	35.3	34.3	33.1	33.3	32.6	33.1	41.02
48.1	49.1	48.1	47.3	42.9	42.1	38.1	37.3	37.2	37.5	37.0	38.2	38.5	38.5	37.7	41.42
50.9	50.5	49.9	50.1	47.9	46.5	44.1	44.2	42.6	40.9	40.4	39.1	38.0	34.5	35.6	45.33
45.0	44.6	43.8	44.0	40.5	38.7	37.1	36.7	36.0	35.4	34.9	34.1	32.9	32.7	33.1	39.28
46.7	46.7	48.1	47.7	47.5	45.6	45.0	44.8	45.3	46.3	44.8	45.8	45.8	46.7	46.9	46.38
61.9	61.3	60.5	58.7	57.1	56.4	55.6	55.4	55.4	—	—	—	—	—	—	56.44
68.1	66.8	67.7	68.1	67.7	61.9	63.4	62.7	61.7	60.4	59.5	59.6	59.6	58.3	60.4	64.43
69.2	67.9	67.9	65.2	64.4	62.2	60.4	59.9	60.0	59.0	59.7	59.4	60.2	59.7	60.2	64.38
65.3	65.9	67.7	66.8	64.9	61.6	59.2	59.2	55.9	55.8	54.6	53.6	54.0	53.5	54.4	62.04
63.8	63.1	63.1	65.7	63.1	59.6	57.3	57.1	55.9	55.4	54.2	52.1	49.2	50.5	50.5	59.70
63.5	62.5	59.7	59.7	59.5	57.7	56.8	56.9	57.0	57.7	58.7	57.5	58.3	58.7	58.8	60.00
67.7	67.0	67.1	67.1	63.2	60.9	61.6	61.9	61.5	56.1	54.9	54.3	55.5	55.1	56.9	62.08
55.63	55.72	55.22	54.76	52.97	51.18	49.91	49.69	49.17	47.85	47.34	46.86	46.61	46.38	46.61	51.49
65.9	67.4	68.5	65.3	63.5	62.5	62.1	61.6	61.3	60.6	59.7	59.2	59.7	58.2	59.8	62.72
62.5	61.2	61.5	58.8	55.8	55.7	55.2	55.2	54.4	50.7	49.9	50.9	49.0	48.2	48.5	57.52
62.8	62.7	64.7	63.1	59.9	58.5	59.7	59.4	58.9	58.3	58.3	58.3	57.3	57.3	58.3	59.66
58.3	58.5	60.0	60.0	60.6	58.1	58.1	59.1	58.6	57.9	56.5	55.2	54.2	53.5	52.9	59.44
58.5	55.9	56.4	56.3	54.6	50.9	46.5	46.4	45.6	44.6	44.0	42.7	41.8	41.2	40.5	50.17
50.0	50.5	47.9	48.4	47.7	44.8	42.8	41.2	40.1	—	—	—	—	—	—	46.67
57.9	59.4	59.5	58.8	56.0	50.9	47.7	46.4	45.2	44.2	43.0	42.3	41.4	41.1	42.1	51.12
61.1	61.5	59.0	60.4	57.4	50.9	49.6	47.5	47.1	46.4	45.0	45.0	44.4	43.8	45.0	52.91
67.2	66.8	64.9	62.6	61.3	58.0	57.0	56.3	54.9	54.2	53.1	52.5	52.9	51.4	51.9	58.56
61.5	61.9	63.5	60.9	58.5	55.5	53.5	50.7	52.9	48.5	46.1	45.9	45.3	44.8	44.2	53.57
53.3	54.3	64.2	53.8	52.5	49.7	47.9	47.7	47.7	49.7	51.9	52.5	52.5	51.7	51.7	51.64
58.7	56.6	55.5	55.4	55.5	54.9	53.4	52.4	50.7	—	—	—	—	—	—	56.74
65.9	67.5	64.9	63.8	61.6	60.0	59.9	58.3	58.3	57.8	56.6	58.3	58.3	57.6	54.8	62.20
62.8	63.9	63.9	63.9	59.5	58.1	57.1	54.3	54.6	54.6	53.0	52.1	49.2	48.5	48.9	57.82
69.1	69.1	67.5	67.5	64.6	62.3	59.8	58.7	58.0	58.9	58.3	57.1	58.0	58.3	58.9	62.28
67.7	74.0	72.4	73.5	72.7	66.7	66.1	65.5	64.9	64.1	62.9	61.7	62.1	62.7	62.6	66.92
66.5	65.1	66.9	66.4	64.1	64.1	63.1	62.6	61.5	59.6	58.0	57.5	56.9	56.2	55.6	64.37
54.2	53.6	53.4	53.2	52.3	51.9	51.0	51.0	50.0	—	—	—	—	—	—	52.30
54.6	54.9	54.4	55.8	55.3	54.4	54.0	53.8	52.7	50.2	50.3	49.4	48.5	48.5	48.4	52.74
59.9	60.1	58.1	59.5	58.3	54.4	53.3	52.3	49.9	52.5	52.4	52.2	51.7	51.5	51.5	55.49
63.6	58.9	61.3	61.5	62.9	57.9	55.7	55.3	54.9	54.1	54.2	53.2	53.0	52.5	53.0	57.41
68.1	57.9	67.8	68.1	62.3	60.4	59.8	57.5	57.0	56.4	55.7	55.4	55.6	55.6	58.0	60.30
56.9	67.9	67.0	64.9	64.4	64.1	63.9	63.3	63.0	62.5	61.3	60.2	60.2	59.2	57.4	62.93
52.1	63.6	63.4	62.5	61.3	60.9	61.6	61.1	61.3	—	—	—	—	—	—	62.78
59.9	69.8	69.2	68.2	67.6	65.7	64.1	62.9	63.0	63.1	63.7	63.3	61.8	61.6	62.1	63.77
38.3	68.8	69.5	70.4	67.5	67.5	65.6	64.5	64.3	63.3	62.1	61.6	60.6	61.6	63.4	66.58
32.20	62.39	62.50	61.65	59.91	57.65	56.48	55.50	54.92	54.87	54.34	53.74	53.20	52.81	53.07	58.18

WET THERMOMETER.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.	1	65.3	67.2	69.6	68.5	69.8	69.3	71.6	69.8	70.2	68.7	69.0
	2	61.7	62.4	62.1	62.5	63.8	63.5	68.3	67.9	67.9	68.2	67.4
	3	60.4	63.7	64.3	64.5	64.5	62.4	64.3	63.1	65.6	63.6	62.5
	4	55.0	62.7	66.9	67.0	69.0	70.3	71.2	69.4	70.5	68.7	69.8
	5	—	—	—	—	—	—	—	—	—	—	—
	6	60.9	64.1	62.6	67.6	63.5	67.2	67.6	63.6	64.3	63.9	63.7
	7	57.6	59.1	58.3	59.1	57.9	58.9	58.5	63.5	64.4	58.3	59.3
	8	56.0	58.7	61.7	62.7	65.4	65.1	66.7	68.1	69.1	70.0	70.9
	9	60.4	64.5	67.9	71.0	70.0	69.8	65.4	65.2	68.5	69.8	71.0
	10	72.6	74.2	78.1	78.3	77.6	77.3	81.1	72.3	78.2	80.0	78.7
	11	67.2	72.8	74.0	74.8	76.3	76.1	74.6	74.6	73.8	71.3	72.3
	12	—	—	—	—	—	—	—	—	—	—	—
	13	56.1	58.7	59.5	63.0	61.7	61.7	63.3	69.8	65.3	67.7	70.3
	14	50.1	54.8	57.2	53.9	55.5	55.3	56.0	55.9	57.1	57.1	53.4
	15	48.4	50.3	51.5	53.0	51.4	52.7	54.2	55.0	57.9	55.4	60.6
	16	51.9	57.5	58.3	61.8	57.2	56.0	56.6	56.2	57.1	57.5	57.2
	17	47.7	54.0	59.1	58.7	60.4	61.8	60.9	61.3	61.3	59.2	58.3
	18	54.3	59.7	61.9	63.1	63.7	64.5	64.3	63.9	64.5	63.6	64.3
	19	—	—	—	—	—	—	—	—	—	—	—
	20	62.5	65.6	65.2	67.7	68.6	68.2	68.4	67.5	69.2	69.0	68.7
	21	63.7	66.1	67.7	67.2	68.1	67.7	68.5	67.4	66.6	66.4	65.4
	22	62.8	63.9	64.5	66.1	65.6	65.9	67.9	67.7	68.2	68.2	66.7
	23	59.2	63.1	63.9	64.5	68.7	68.8	69.8	70.1	67.9	67.1	68.4
	24	65.6	64.9	63.9	64.5	64.3	64.6	64.8	63.8	65.3	66.9	66.5
	25	60.0	62.5	64.5	64.9	64.9	65.3	64.5	65.8	70.2	69.1	68.8
	26	—	—	—	—	—	—	—	—	—	—	—
	27	61.5	64.9	66.3	66.3	66.5	65.3	62.9	61.8	61.8	62.9	62.7
	28	59.4	62.6	65.1	66.3	67.9	67.4	66.9	67.2	68.4	68.3	67.7
	29	68.3	71.2	70.5	72.8	73.3	74.3	75.8	74.0	72.8	74.3	74.6
	30	71.2	73.5	75.1	75.6	75.4	74.3	75.0	73.0	74.8	73.9	72.4
	31	61.8	61.6	62.4	63.3	63.6	62.9	64.7	63.3	63.9	63.7	64.5
Hourly Means	60.06	63.12	64.52	65.51	65.73	65.80	66.44	65.97	66.78	66.39	66.51	65.84
AUGUST.	1	58.7	60.2	60.2	61.1	62.3	64.6	66.1	66.8	65.9	65.9	64.9
	2	—	—	—	—	—	—	—	—	—	—	—
	3	57.9	63.1	66.5	67.9	68.6	65.8	70.5	72.6	70.8	68.7	66.8
	4	60.6	64.1	68.3	69.2	71.5	72.3	73.4	74.1	74.1	74.2	71.8
	5	67.7	68.9	71.5	74.6	71.8	75.8	75.8	76.5	76.1	75.6	74.6
	6	60.4	62.3	64.5	68.1	73.4	73.0	72.6	72.0	71.2	70.8	70.1
	7	60.4	62.9	65.3	68.4	73.2	71.0	71.2	72.0	72.8	70.8	69.3
	8	62.9	63.3	63.7	64.1	63.8	65.9	69.2	68.9	68.5	68.1	69.0
	9	—	—	—	—	—	—	—	—	—	—	—
	10	64.4	64.4	64.9	65.2	66.2	67.7	66.2	66.2	67.0	67.5	66.7
	11	50.7	53.1	55.9	60.0	61.5	61.9	64.5	64.1	64.5	64.5	63.9
	12	55.0	60.6	65.1	67.7	71.2	70.5	69.6	70.2	70.2	70.6	69.6
	13	66.9	69.3	70.6	71.0	73.8	74.1	73.5	74.5	70.8	71.9	72.8
	14	59.7	61.1	63.6	64.1	69.2	69.5	69.8	68.4	67.6	69.1	69.8
	15	57.9	62.8	65.9	69.2	71.1	71.2	70.4	69.8	72.0	71.2	71.0
	16	—	—	—	—	—	—	—	—	—	—	—
	17	59.1	60.8	61.9	63.1	63.9	62.9	62.6	61.7	62.7	60.9	60.6
	18	47.4	48.9	49.9	53.3	56.7	57.8	57.3	57.7	58.1	59.3	58.8
	19	53.1	56.6	56.8	56.1	56.2	57.8	58.0	58.5	60.2	59.3	59.8
	20	60.1	60.9	61.3	61.9	62.8	63.5	64.2	63.8	65.2	64.1	66.6
	21	56.0	61.7	65.6	68.1	67.6	67.7	68.7	67.9	68.7	69.0	66.7
	22	61.9	62.4	62.4	62.9	64.3	64.5	68.1	67.5	68.7	67.2	66.6
	23	—	—	—	—	—	—	—	—	—	—	—
	24	49.9	52.0	54.6	58.1	59.4	60.4	60.9	61.5	60.4	61.5	60.6
	25	53.1	57.5	61.7	63.4	63.8	64.7	64.4	64.4	64.9	65.9	65.3
	26	55.1	63.4	66.2	66.6	65.9	65.9	67.9	66.7	65.6	63.4	62.9
	27	58.3	63.1	65.6	68.5	70.0	70.3	69.8	68.8	68.8	67.4	66.8
	28	60.4	62.4	63.5	64.3	68.7	69.3	71.0	71.8	71.0	70.8	69.5
	29	60.4	64.3	68.5	70.3	70.4	71.8	71.8	70.8	63.9	64.5	64.9
	30	—	—	—	—	—	—	—	—	—	—	—
	31	63.5	64.1	69.8	70.8	71.0	72.4	72.9	73.0	71.8	72.1	72.0
Hourly Means	58.52	61.32	63.60	65.31	66.97	67.55	68.09	68.08	67.76	67.46	67.09	66.75

9	10	11
3	4	5
68°7	69°0	68°4
68°2	67°4	67°4
63°6	62°5	64°5
68°7	69°8	68°1
—	—	—
63°9	63°7	61°6
58°3	59°3	58°1
70°0	70°9	69°3
69°8	71°0	71°5
80°0	78°7	71°3
71°3	72°3	74°2
—	—	—
67°7	70°3	65°6
57°1	51°1	53°1
55°4	60°6	57°1
57°5	57°2	58°1
59°2	58°3	58°9
63°6	61°3	64°5
—	—	—
69°0	68°7	67°6
66°4	65°1	64°6
68°2	66°7	66°6
67°1	68°4	67°6
66°9	66°5	65°4
69°1	68°8	69°6
—	—	—
62°9	62°7	61°3
68°3	67°7	69°0
74°3	74°6	72°8
73°9	72°4	72°1
63°7	64°5	66°5
—	—	—
66°39	66°51	65°81
—	—	—
65°9	64°9	61°5
—	—	—
68°7	66°8	66°8
74°2	74°8	72°2
75°6	74°6	74°6
70°8	70°1	69°8
70°8	69°3	70°2
68°1	69°0	67°9
—	—	—
67°5	66°7	64°5
64°5	63°9	63°9
70°6	69°6	67°4
71°9	72°8	73°1
69°1	69°8	68°8
71°2	71°0	71°3
—	—	—
60°9	60°6	59°4
59°3	58°8	58°1
59°3	59°8	59°7
64°1	66°6	66°8
69°0	66°7	66°3
67°2	66°6	64°5
—	—	—
61°5	60°6	61°8
65°9	65°3	64°6
63°4	62°9	62°6
67°1	66°8	66°0
70°8	69°5	69°1
64°5	64°9	65°9
72°1	72°0	72°1
—	—	—
67°46	67°09	66°75

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
66°8	66°4	65°3	64°4	63°3	62°7	62°1	61°6	61°8	62°8	62°1	61°3	66°38	
68°1	65°9	62°1	59°1	57°6	56°3	57°2	58°3	58°3	57°1	57°2	56°8	62°39	
64°9	63°9	57°9	55°9	54°3	53°4	52°7	52°5	52°9	52°5	52°3	52°3	59°53	
68°1	66°6	65°5	63°0	63°2	62°0	—	—	—	—	—	—	65°43	
—	—	—	—	—	—	63°8	63°1	63°1	62°1	61°5	59°8	—	
61°1	59°4	59°2	58°8	57°5	57°2	56°4	56°2	56°1	55°6	54°6	54°3	60°75	
57°0	56°6	55°4	55°4	54°6	54°4	51°1	52°5	52°5	52°6	52°7	51°4	56°63	
69°3	70°3	66°2	61°7	61°5	60°9	60°7	61°1	60°9	58°1	57°4	56°9	63°70	
72°1	71°6	69°2	67°7	68°1	69°6	69°8	68°3	68°9	67°0	66°7	69°2	68°47	
69°8	67°9	68°3	66°7	68°1	67°0	68°0	66°8	64°9	65°1	65°1	61°3	71°74	
71°2	69°3	71°3	70°1	71°0	70°3	—	—	—	—	—	—	—	
—	—	—	—	—	—	60°2	59°2	57°1	55°4	53°1	55°3	68°56	
65°1	63°3	59°9	59°2	59°2	58°3	56°1	48°4	47°1	44°8	41°3	45°0	58°89	
32°4	51°4	49°7	48°8	46°4	47°5	47°4	46°4	46°4	44°6	44°6	45°1	51°30	
57°4	55°4	51°8	54°8	52°0	51°5	51°5	50°5	50°5	49°2	47°7	47°9	52°95	
57°7	54°6	51°5	49°1	47°5	46°5	46°3	46°1	45°5	45°0	44°7	43°6	52°64	
55°1	57°5	51°4	51°2	51°9	51°2	51°2	50°2	49°7	48°9	48°3	49°2	55°44	
63°1	62°6	58°7	56°6	56°0	54°6	—	—	—	—	—	—	—	
—	—	—	—	—	—	59°6	59°0	58°1	58°3	60°2	59°2	60°75	
67°7	66°4	64°1	60°2	58°8	58°8	58°7	60°0	59°2	57°8	56°2	57°9	63°92	
64°1	63°9	63°8	63°3	62°5	62°1	63°1	60°9	59°6	59°8	60°2	59°8	61°27	
66°2	64°1	60°2	59°6	58°1	56°6	56°6	56°6	55°1	54°0	55°5	56°4	62°14	
67°0	66°8	64°9	64°1	63°7	63°1	62°4	63°3	63°9	62°9	63°8	61°0	65°35	
66°2	66°1	65°4	64°5	61°9	60°5	60°2	60°1	60°2	60°5	60°5	59°4	63°61	
69°2	67°7	63°9	61°1	59°2	59°2	—	—	—	—	—	—	—	
—	—	—	—	—	—	61°1	61°3	60°2	58°3	58°3	58°1	63°63	
62°4	58°8	56°5	54°6	53°4	52°9	53°6	54°4	55°2	55°0	56°1	57°5	59°79	
68°8	67°6	66°2	63°9	62°4	60°8	62°7	62°9	64°5	64°5	64°9	65°0	65°43	
71°8	72°2	72°0	72°3	72°3	71°3	70°9	70°5	69°8	69°3	69°3	68°1	71°85	
70°4	69°5	66°9	65°6	63°6	62°1	61°1	63°8	62°9	61°6	61°7	61°8	69°19	
65°9	63°1	60°2	58°6	55°5	55°2	55°0	56°2	56°0	55°8	56°4	56°4	60°69	
—	—	—	—	—	—	—	—	—	—	—	—	—	
67°26	64°03	61°98	60°38	59°39	58°63	58°61	58°28	57°87	56°92	56°88	57°00	62°41	
—	—	—	—	—	—	—	—	—	—	—	—	—	
64°1	61°5	58°8	58°3	58°3	58°3	57°3	56°2	55°8	55°2	56°0	55°2	60°67	
—	—	—	—	—	—	57°3	56°2	55°8	55°2	56°0	55°2	—	
64°3	64°7	63°5	62°5	58°1	57°9	57°1	56°9	56°1	56°1	55°5	55°9	63°29	
74°4	71°2	71°5	69°3	68°9	66°8	66°4	66°1	64°9	64°0	65°1	64°1	69°57	
73°0	71°8	71°6	71°5	70°8	70°8	68°1	64°7	63°3	61°5	60°2	60°2	70°59	
69°8	63°6	63°1	60°9	59°3	59°1	59°3	59°2	59°2	58°8	59°7	58°9	64°96	
69°2	66°2	64°6	63°1	63°1	61°2	62°1	62°7	62°7	62°5	62°4	62°3	66°23	
66°8	65°9	66°4	66°3	66°5	65°9	—	—	—	—	—	—	—	
—	—	—	—	—	—	64°1	64°5	63°3	62°6	62°9	62°8	65°55	
61°3	57°7	55°6	56°2	54°4	54°6	52°8	51°7	50°7	50°1	49°1	48°7	59°74	
61°4	62°3	59°7	58°3	57°5	56°6	55°9	54°6	53°6	53°8	54°0	52°3	58°81	
67°5	66°4	64°6	64°3	64°1	63°8	64°4	64°7	64°2	64°9	64°9	64°4	66°08	
72°7	65°9	65°5	65°4	62°3	62°3	62°3	60°7	59°6	58°1	57°5	57°0	67°17	
68°3	66°5	64°5	61°3	60°4	59°6	58°9	59°1	58°3	57°6	57°7	57°1	63°75	
70°4	69°2	68°7	67°9	68°5	67°9	—	—	—	—	—	—	—	
—	—	—	—	—	—	59°8	59°2	59°7	59°5	59°7	58°1	66°35	
58°5	57°7	55°9	55°0	54°4	54°0	53°7	50°0	48°5	48°6	48°5	48°1	57°19	
57°4	54°3	53°4	51°2	51°2	50°9	50°1	50°4	49°6	48°9	48°9	49°2	53°29	
60°2	59°8	59°5	60°2	59°8	60°4	60°2	60°5	60°7	60°4	60°0	59°8	58°90	
66°1	64°1	62°7	62°5	61°5	61°5	60°9	59°9	59°2	57°5	57°2	56°6	62°12	
66°3	65°5	64°7	64°4	64°9	63°7	63°6	62°5	61°8	61°8	61°7	62°4	64°89	
64°1	62°8	62°3	61°8	61°1	60°5	—	—	—	—	—	—	—	
—	—	—	—	—	—	57°4	55°5	55°1	54°3	52°1	50°6	61°61	
60°8	56°7	54°4	52°5	52°4	52°0	51°4	50°3	49°1	49°4	49°6	50°5	55°44	
63°9	63°3	62°1	61°1	61°3	60°7	60°2	59°5	58°7	57°7	56°9	55°6	61°45	
61°1	60°2	59°4	58°1	58°0	58°1	57°9	56°8	56°2	56°6	56°0	56°2	61°12	
65°1	61°9	61°1	59°3	59°1	58°9	59°6	58°8	58°7	59°7	59°4	59°6	63°53	
67°7	66°6	65°6	64°1	63°5	63°6	62°3	61°4	60°4	59°6	59°4	58°8	65°20	
66°4	63°8	63°1	62°3	61°4	62°3	—	—	—	—	—	—	—	
—	—	—	—	—	—	63°1	60°2	59°6	59°6	60°2	62°9	64°68	
69°4	68°2	67°0	66°5	65°7	63°1	62°1	62°1	61°9	60°4	63°3	63°1	67°43	
—	—	—	—	—	—	—	—	—	—	—	—	—	
65°89	63°76	62°67	61°70	61°02	60°56	59°65	58°79	58°13	57°66	57°61	57°32	63°07	

WET THERMOMETER.												
Time of Mean Gustings Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	1	63.7	67.0	68.3	72.3	73.7	70.5	71.0	72.4	72.8	71.8	71.8
	2	64.4	67.9	70.2	72.5	73.6	74.6	76.0	75.5	74.8	74.0	73.8
	3	68.2	69.4	69.4	69.4	70.8	71.8	71.3	71.0	71.0	71.8	70.6
	4	65.9	67.9	69.0	70.0	70.8	73.6	73.4	73.4	73.8	73.5	73.2
	5	69.8	71.3	73.0	74.6	75.5	74.2	73.5	73.8	73.5	74.3	73.8
	6	—	—	—	—	—	—	—	—	—	—	—
	7	64.7	69.2	73.0	74.8	76.2	77.0	78.4	76.7	76.1	75.5	74.6
	8	57.8	59.1	60.2	61.3	62.8	63.5	63.1	63.1	64.9	60.5	59.2
	9	45.5	47.0	49.1	50.2	51.7	51.9	51.3	53.8	54.2	54.1	54.2
	10	53.7	54.4	55.2	54.1	54.6	54.8	54.4	55.0	56.9	57.6	58.5
	11	62.9	65.3	65.7	68.0	68.4	69.3	69.8	71.8	72.2	70.8	70.5
	12	67.2	70.8	73.3	74.2	74.2	73.9	71.8	63.4	65.9	67.0	67.4
	13	—	—	—	—	—	—	—	—	—	—	—
	14	65.3	68.3	71.2	72.2	73.8	75.5	75.0	75.8	76.7	75.4	74.4
	15	50.4	50.0	49.2	49.2	50.0	49.1	51.2	50.2	50.9	51.4	52.7
	16	43.1	47.9	52.7	55.5	57.2	57.8	57.9	57.5	57.9	57.2	56.9
	17	52.1	52.5	54.2	55.2	57.0	57.8	59.6	59.2	57.8	57.3	56.2
	18	54.6	55.1	55.8	58.3	59.6	60.7	60.8	61.5	61.6	61.8	61.7
	19	45.8	50.7	56.8	59.3	61.6	65.1	66.1	64.7	65.7	65.1	64.3
	20	—	—	—	—	—	—	—	—	—	—	—
	21	45.8	48.4	48.2	48.7	48.7	49.7	51.0	52.1	52.2	52.4	52.2
	22	38.5	42.3	49.0	54.0	55.4	56.8	57.5	58.0	58.6	58.9	58.7
	23	44.5	52.7	58.9	61.2	62.9	64.7	66.6	66.4	66.7	66.5	66.1
	24	58.3	61.8	61.8	62.9	63.3	63.4	64.4	63.9	59.4	58.9	59.1
	25	48.4	48.9	49.2	49.9	52.3	53.7	54.2	54.6	55.5	55.9	54.2
	26	42.3	44.8	47.1	50.7	52.7	52.9	53.8	55.4	55.0	55.8	55.5
	27	—	—	—	—	—	—	—	—	—	—	—
	28	37.7	40.3	42.9	45.2	47.1	51.7	51.5	51.5	53.4	53.9	53.7
	29	54.1	55.5	56.8	59.2	60.5	61.2	60.5	61.1	60.6	59.7	59.5
	30	55.6	57.4	57.8	60.5	60.8	62.6	63.3	63.1	62.3	62.3	61.3
Hourly Means		54.63	57.15	59.15	60.90	62.20	62.99	63.35	63.24	63.47	63.20	62.91
OCTOBER.	1	49.1	47.3	47.7	47.0	47.0	47.8	48.5	48.7	49.9	50.0	48.3
	2	45.5	45.1	44.9	45.3	46.2	47.1	47.1	48.0	47.3	47.5	49.2
	3	38.3	39.6	45.0	48.5	48.9	50.3	50.9	51.1	51.4	50.3	49.2
	4	—	—	—	—	—	—	—	—	—	—	—
	5	44.2	45.3	49.1	51.6	55.2	57.1	57.9	57.9	57.5	58.1	57.3
	6	40.5	41.2	47.1	54.3	56.5	57.5	58.8	59.5	59.5	59.4	58.0
	7	49.3	51.7	58.3	60.8	61.5	62.1	63.4	63.9	62.4	63.6	63.3
	8	59.3	59.0	60.9	60.9	62.1	62.5	59.6	58.5	57.5	57.2	57.0
	9	56.4	57.0	57.3	64.5	65.5	65.3	65.1	64.3	54.5	53.0	51.3
	10	36.2	36.5	37.0	38.5	40.1	42.4	43.5	44.1	44.5	45.4	45.1
	11	—	—	—	—	—	—	—	—	—	—	—
	12	48.4	51.3	52.8	51.6	55.0	55.9	56.4	56.4	57.0	56.9	57.2
	13	47.5	47.1	47.1	47.4	46.9	46.2	45.6	45.8	45.8	45.8	44.8
	14	34.9	34.3	39.1	41.5	46.4	46.5	46.4	46.2	45.8	46.4	46.2
	15	36.2	36.0	39.0	40.5	41.2	41.6	41.7	41.8	42.6	43.2	43.3
	16	45.4	46.5	47.5	48.2	51.3	52.2	53.8	56.1	55.6	55.8	55.0
	17	33.9	32.6	31.8	33.4	34.1	34.3	34.9	35.1	34.2	34.2	33.6
	18	—	—	—	—	—	—	—	—	—	—	—
	19	31.8	31.0	35.8	38.8	40.4	42.3	42.1	40.8	40.3	40.8	41.2
	20	41.0	42.6	42.6	43.5	43.1	43.8	45.0	45.4	43.3	41.2	41.4
	21	31.7	32.0	33.5	36.2	37.3	37.9	38.8	39.5	38.5	37.6	37.4
	22	36.3	36.2	36.5	37.0	36.4	35.8	34.9	34.1	34.1	32.9	31.2
	23	23.8	25.1	25.5	27.6	32.4	36.2	37.1	39.0	38.8	38.9	40.0
	24	32.8	34.3	37.1	39.4	41.4	40.9	40.9	40.9	38.9	39.1	38.2
	25	—	—	—	—	—	—	—	—	—	—	—
	26	32.3	35.5	38.3	40.5	43.1	46.4	48.2	49.4	49.1	48.4	48.1
	27	49.9	47.9	46.7	45.4	44.8	46.4	44.2	44.2	44.2	42.6	41.9
	28	28.0	28.5	30.0	30.0	31.4	31.7	32.3	34.3	35.6	36.0	35.6
	29	34.3	31.7	35.8	39.4	40.9	42.5	39.4	40.9	41.2	40.9	39.9
	30	32.0	32.2	32.9	33.9	34.1	34.6	34.4	34.5	34.9	34.5	33.9
	31	28.4	30.5	29.4	29.7	30.5	31.6	32.0	33.9	35.5	36.3	36.9
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		39.53	40.04	41.80	43.64	44.95	45.89	46.03	46.46	45.92	45.78	45.35

9	10	11
3	4	5
71°8	71°8	71°1
74°0	73°8	73°2
71°8	70°6	71°1
73°5	73°2	72°8
74°3	73°8	72°2
—	—	—
75°5	74°6	73°9
60°5	59°2	58°3
54°1	54°2	54°6
57°6	58°5	59°4
70°8	70°5	71°3
67°0	67°4	68°7
—	—	—
75°4	74°4	75°4
51°4	52°7	52°7
57°2	56°9	57°2
57°3	56°2	55°6
61°6	61°8	61°7
65°1	65°1	64°3
—	—	—
52°4	52°2	50°9
58°9	59°3	58°7
66°5	66°1	65°1
58°9	59°1	58°3
55°9	54°2	51°9
55°8	55°5	55°1
—	—	—
53°9	53°7	52°9
59°7	59°5	60°0
62°3	61°3	59°2
—	—	—
63°20	62°91	62°53
—	—	—
50°0	48°3	48°3
47°5	49°2	49°0
50°3	49°2	47°2
—	—	—
58°1	57°3	56°9
59°4	58°0	57°5
63°6	63°3	61°7
37°2	57°0	56°4
53°0	51°3	50°7
45°4	45°1	44°2
—	—	—
56°9	57°2	56°9
45°8	44°8	42°7
46°4	46°2	44°1
43°2	43°3	41°2
55°8	55°0	55°5
34°2	33°6	32°9
—	—	—
40°8	41°2	40°0
41°2	41°4	40°2
37°6	37°4	37°2
32°9	31°2	31°0
38°9	40°0	38°9
39°1	38°2	36°7
—	—	—
48°4	48°1	47°0
42°6	41°9	40°8
36°0	35°6	33°2
40°9	39°9	39°4
34°5	33°9	32°6
36°3	36°9	38°1
—	—	—
45°78	45°35	44°46

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
71.0	69.6	69.8	69.3	67.7	69.3	67.5	66.7	65.5	65.4	64.5	64.5	69.05	
72.8	72.4	71.8	71.0	69.8	69.4	69.5	69.2	68.4	68.0	68.6	67.6	71.21	
71.0	70.4	68.3	67.7	67.9	68.2	68.3	69.2	69.5	69.1	68.6	65.9	69.58	
71.6	70.8	70.5	70.3	70.0	70.0	70.5	70.8	70.8	70.8	70.4	69.4	70.97	
70.2	67.9	66.7	65.1	64.1	64.1	—	65.9	65.5	64.9	64.0	64.9	69.48	
72.8	72.3	69.6	69.4	67.9	67.0	63.9	60.3	59.7	58.9	58.9	59.0	69.58	
57.2	55.4	55.5	54.0	50.6	48.9	47.5	46.7	46.0	45.8	45.3	45.1	55.49	
53.2	53.1	54.0	54.6	54.2	56.1	56.2	52.5	55.8	54.8	54.0	52.7	52.87	
59.0	59.9	59.7	—	57.7	57.8	58.5	58.1	59.3	60.3	61.3	62.1	57.19	
70.2	66.9	67.4	66.7	65.3	65.3	64.5	66.3	65.4	66.7	65.9	66.7	67.64	
66.9	65.1	62.9	60.7	60.6	61.5	—	64.4	64.3	64.6	64.5	64.4	66.74	
74.0	74.0	73.8	72.2	70.1	67.1	66.1	63.4	60.9	51.0	53.1	51.2	69.12	
51.3	50.1	49.2	48.1	47.5	48.1	47.9	47.1	46.9	45.4	44.3	44.4	49.05	
57.4	57.3	56.8	56.4	54.8	52.9	51.1	50.3	50.9	51.0	51.1	51.9	54.20	
55.4	55.1	55.5	55.4	55.3	55.1	54.9	54.8	55.2	55.2	54.6	55.4	55.68	
59.4	55.6	53.6	54.0	53.5	53.1	51.8	51.2	49.7	47.1	46.7	45.8	55.56	
63.9	60.7	60.4	58.5	57.4	55.7	—	61.7	61.4	58.7	54.2	52.1	59.45	
32.2	49.2	47.3	46.7	45.6	44.6	44.2	42.9	42.1	41.1	41.5	40.4	47.43	
57.6	53.5	51.4	49.2	48.5	47.3	46.5	46.4	45.8	44.8	44.4	44.4	51.12	
63.6	64.1	63.7	63.1	62.9	61.1	61.7	62.5	62.0	59.7	58.8	58.5	61.83	
58.1	57.1	56.0	54.9	53.7	52.7	52.0	51.3	50.5	50.1	49.2	48.7	57.07	
50.3	49.7	50.3	49.4	49.2	49.9	49.1	48.9	48.7	46.2	44.8	43.4	50.36	
54.6	53.5	53.3	50.7	49.7	46.5	—	43.3	42.5	41.8	39.8	38.9	48.91	
53.5	52.4	51.5	49.7	49.3	49.4	49.7	49.7	49.7	49.7	50.9	52.2	49.57	
58.9	56.2	54.4	54.6	52.7	55.6	55.5	55.2	55.2	55.4	55.0	55.4	57.20	
61.7	60.7	60.4	60.4	58.3	56.0	53.8	53.2	52.3	50.4	48.7	50.5	58.03	
61.84	60.50	59.76	58.88	57.86	57.41	57.14	56.55	56.17	55.10	54.65	54.32	59.41	
48.1	47.9	46.4	45.1	44.6	44.7	44.7	44.0	44.3	44.0	44.6	44.8	46.78	
47.3	43.7	43.1	40.3	39.4	40.2	40.2	39.0	38.6	37.5	37.5	38.3	43.64	
44.0	43.6	43.6	42.6	42.1	41.2	—	44.7	42.5	41.6	40.7	41.2	44.97	
52.2	49.2	50.2	49.3	46.7	44.6	44.6	42.1	40.9	37.9	39.8	40.9	49.52	
57.5	54.8	55.2	52.3	50.5	53.3	53.5	53.6	51.3	49.7	50.7	48.5	53.36	
60.5	63.3	63.1	63.3	62.8	61.9	61.6	59.1	58.0	59.2	59.2	59.2	60.55	
59.0	55.9	56.0	56.9	56.7	57.0	57.0	56.4	56.6	56.9	56.6	56.6	57.89	
—	47.9	47.5	44.6	40.5	39.6	39.2	39.6	39.2	38.3	37.7	36.1	50.16	
39.4	37.5	37.1	37.1	37.4	36.1	—	48.7	48.8	49.1	48.7	46.5	42.22	
57.1	57.4	53.1	51.5	51.1	51.1	50.9	50.8	50.8	49.6	49.7	49.8	53.40	
43.3	42.1	41.9	41.3	41.3	40.5	39.8	39.4	38.1	37.9	37.2	36.8	43.01	
40.7	40.7	42.7	42.5	42.5	42.5	42.6	42.1	41.0	40.9	38.3	37.4	42.15	
39.0	38.3	38.1	37.9	38.5	39.5	39.8	40.9	40.9	43.5	44.5	45.6	40.62	
54.2	52.9	51.4	47.9	43.1	42.8	42.8	40.0	37.9	37.3	36.2	34.7	47.67	
33.5	32.0	30.6	29.4	28.6	29.2	—	34.8	34.5	33.9	34.3	33.8	33.5	33.04
39.8	39.0	39.0	38.8	38.7	39.4	40.6	40.9	40.8	40.6	40.8	40.6	39.35	
39.3	37.7	36.9	35.3	34.1	33.2	31.5	32.0	31.3	31.0	30.3	31.7	38.22	
36.7	35.6	33.7	34.2	34.9	34.3	34.3	34.3	34.7	35.3	36.0	36.2	35.74	
28.8	28.4	27.9	26.8	24.9	22.4	21.8	21.5	20.5	20.2	22.0	23.0	29.36	
38.5	38.1	36.2	36.3	36.7	35.3	35.6	34.1	35.1	34.9	34.2	32.5	34.62	
36.3	35.3	34.3	31.8	31.3	30.5	—	—	—	—	—	—	35.69	
49.8	49.7	49.7	49.7	49.7	49.7	50.2	49.7	49.7	49.1	50.0	50.2	46.81	
40.0	39.1	38.7	37.1	36.7	35.9	35.3	34.6	32.9	32.2	32.0	29.4	40.12	
30.3	28.1	27.5	29.2	31.0	31.0	28.4	30.8	32.5	32.6	31.7	32.3	31.33	
37.9	36.7	36.2	36.1	35.1	34.3	33.5	33.0	32.9	32.6	32.5	32.0	36.75	
32.3	31.8	32.2	31.8	31.1	30.5	30.1	29.2	28.6	28.8	28.3	28.4	31.98	
38.5	39.1	40.4	39.4	39.8	39.9	—	45.5	46.1	46.2	47.0	47.5	37.89	
—	—	—	—	—	—	—	—	—	—	—	—	—	
43.33	42.44	41.95	41.06	40.36	40.02	40.94	40.41	40.02	39.87	39.73	39.46	42.48	

WET THERMOMETER.												
Hours of Mean Toronto Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	2	47.7	47.3	47.1	46.2	50.1	51.4	51.1	51.0	51.6	52.2	52.4
	3	46.0	46.0	46.7	47.9	48.7	49.6	49.7	48.7	49.2	48.5	49.4
	4	40.9	41.0	41.0	46.8	45.6	46.2	46.0	45.8	45.8	45.5	44.5
	5	36.0	36.2	38.3	41.2	44.0	44.8	45.3	45.5	44.5	44.8	44.0
	6	30.0	31.2	32.2	38.3	43.1	44.8	45.3	45.0	45.4	45.6	42.9
	7	37.3	38.3	39.7	41.6	43.1	44.8	46.4	45.5	45.8	46.1	44.9
	8	—	—	—	—	—	—	—	—	—	—	—
	9	19.2	19.1	49.9	50.3	52.7	52.4	53.3	53.0	52.7	52.6	52.5
	10	48.8	48.9	49.4	50.3	51.2	52.0	52.3	52.5	52.4	51.3	50.5
	11	49.4	49.9	50.1	50.2	50.4	50.5	50.3	50.7	50.5	51.2	51.2
	12	42.9	42.4	42.8	43.6	44.2	44.6	44.6	45.4	45.2	44.8	45.0
	13	41.1	41.1	44.1	44.2	44.4	44.7	44.6	44.6	44.6	44.7	44.7
	14	42.9	42.1	41.6	42.1	42.3	41.8	41.9	43.5	42.5	41.7	41.4
	15	—	—	—	—	—	—	—	—	—	—	—
	16	42.0	42.8	43.1	43.8	45.3	46.5	46.4	45.8	45.4	44.8	44.3
	17	38.9	40.2	42.1	43.5	44.7	44.5	45.0	46.1	45.5	45.6	45.5
	18	42.8	42.1	41.5	47.7	49.7	49.7	48.7	46.8	46.2	44.9	44.6
	19	40.9	40.2	39.4	39.2	39.6	40.2	40.2	40.0	40.0	40.2	39.2
	20	34.9	34.5	34.5	34.5	35.8	37.1	37.4	38.2	39.4	39.1	38.1
	21	35.1	34.5	34.7	35.4	35.1	36.3	37.4	37.7	39.1	40.4	39.0
	22	—	—	—	—	—	—	—	—	—	—	—
	23	28.3	28.3	28.4	29.3	30.1	31.2	30.6	31.0	32.0	32.7	32.6
	24	33.1	31.5	32.1	33.6	36.2	37.5	38.1	39.0	37.9	36.9	34.9
	25	23.9	20.9	19.2	19.7	18.2	18.7	18.9	19.1	19.6	19.4	20.0
	26	17.5	17.4	18.8	20.8	22.8	25.1	26.2	26.8	27.6	24.9	23.6
	27	22.2	21.1	21.7	23.4	23.4	24.2	25.9	28.0	29.4	30.7	31.0
	28	36.4	36.0	36.2	36.1	36.7	37.9	38.1	38.7	39.1	38.2	37.3
	29	—	—	—	—	—	—	—	—	—	—	—
	30	25.5	24.2	24.2	25.1	25.9	26.6	26.7	26.8	27.4	26.4	26.1
Hourly Means	—	37.47	37.21	37.80	39.10	40.14	40.92	41.22	41.41	41.56	41.34	40.74
DECEMBER.	1	13.1	12.6	13.7	17.9	19.4	21.9	23.2	24.7	25.5	26.0	26.4
	2	33.5	34.3	35.2	36.0	37.2	38.1	39.0	40.7	42.6	41.3	40.9
	3	31.0	30.8	29.5	30.3	30.5	30.9	31.5	31.0	28.8	28.4	28.5
	4	24.5	24.6	25.7	28.3	31.0	29.5	30.6	31.2	31.6	32.0	32.0
	5	27.7	28.3	28.3	28.8	30.8	31.5	31.8	32.0	31.6	32.0	32.1
	6	—	—	—	—	—	—	—	—	—	—	—
	7	39.0	32.0	32.7	34.8	35.1	36.0	36.5	36.9	37.0	37.1	37.5
	8	36.3	36.2	34.2	35.1	35.0	34.8	33.5	34.1	34.3	34.4	33.3
	9	30.4	30.0	29.6	28.8	29.1	29.5	30.3	30.5	30.3	30.3	30.1
	10	31.0	31.0	30.3	29.3	29.4	30.1	30.6	31.2	31.8	32.0	31.2
	11	23.9	22.5	22.0	22.2	23.6	24.9	25.5	26.2	26.4	27.3	27.1
	12	18.9	16.9	16.1	15.9	15.0	16.1	16.6	16.6	18.0	18.8	19.4
	13	—	—	—	—	—	—	—	—	—	—	—
	14	15.7	15.9	15.6	15.2	15.1	16.4	17.9	19.2	20.3	20.1	19.1
	15	8.0	7.3	10.0	12.1	16.7	18.5	20.0	21.7	23.3	22.8	22.2
	16	11.6	11.9	12.4	17.1	19.9	21.2	24.9	25.6	25.6	24.6	24.6
	17	21.1	21.5	22.0	23.9	24.9	25.1	25.9	25.1	25.4	26.1	25.2
	18	11.5	11.3	10.7	14.4	17.1	20.1	23.0	25.4	26.8	27.3	26.8
	19	27.7	27.6	27.9	27.2	27.5	28.4	28.8	30.6	30.6	30.6	28.8
	20	—	—	—	—	—	—	—	—	—	—	—
	21	29.6	19.2	17.0	17.8	19.2	20.4	21.6	22.8	23.5	23.3	22.8
	22	20.6	19.6	18.8	18.9	19.7	20.0	20.9	21.3	23.0	23.4	23.0
	23	7.4	4.2	4.6	9.6	14.1	17.0	18.8	20.2	21.4	21.3	21.3
	24	25.5	27.1	27.1	28.3	28.8	31.4	31.7	31.6	31.8	32.2	32.2
	25	—	—	—	—	—	—	—	—	—	—	—
	26	16.3	16.1	15.7	17.9	21.4	24.5	27.1	27.9	29.2	30.0	29.2
	27	—	—	—	—	—	—	—	—	—	—	—
	28	32.9	31.8	32.3	32.0	32.8	31.2	28.4	29.5	28.2	28.1	27.9
	29	17.6	18.0	18.8	20.5	23.7	25.1	25.9	25.9	25.6	26.2	26.2
	30	36.2	36.7	36.5	37.0	37.2	38.6	38.1	39.0	37.5	36.7	36.3
	31	33.7	33.8	35.1	36.5	37.7	37.9	37.9	38.5	39.0	38.3	38.0
Hourly Means	—	23.41	23.12	23.15	24.45	25.86	27.02	27.69	28.45	28.81	28.88	28.55

* Christmas Day.

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
52°2	52°4	52°4	32°2	51°7	51°9	51°2	50°1	49°7	48°5	48°9	44°8	41°4	42°7	44°3	49°20
48°5	49°4	47°5	47°5	47°2	47°3	47°4	47°4	44°8	41°8	41°2	39°5	40°4	40°2	41°0	45°98
45°5	44°5	42°9	41°4	40°7	39°8	38°7	38°3	38°3	38°3	37°7	37°4	37°3	36°6	36°4	41°48
44°8	44°0	41°6	37°7	35°3	34°5	35°1	32°8	31°8	29°9	30°6	30°6	29°9	30°5	31°0	37°33
45°6	42°9	42°4	40°7	38°9	36°5	36°0	35°8	36°2	36°3	34°9	36°3	35°6	36°0	36°5	38°58
46°1	44°9	43°5	43°9	44°0	45°2	45°0	43°9	43°9	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	47°9	47°5	48°6	49°3	49°3	49°3	44°78
52°6	52°5	51°7	51°4	51°3	51°0	51°1	50°7	50°4	50°3	49°9	49°7	49°7	49°4	48°9	50°97
51°3	50°5	49°7	49°7	49°7	49°8	50°1	50°2	49°9	50°5	49°9	49°7	49°2	49°2	49°1	50°26
51°2	51°2	49°9	49°4	48°8	48°3	46°1	45°2	44°6	44°7	44°6	44°7	44°6	44°6	43°8	48°07
45°2	44°8	45°0	44°6	44°4	44°3	43°8	41°0	43°4	43°5	43°5	43°5	43°5	43°5	43°5	44°01
44°6	44°7	44°7	44°7	44°6	44°6	44°6	44°1	43°4	43°1	43°5	43°1	43°1	42°9	43°5	44°11
41°7	41°4	41°6	41°5	42°5	43°9	43°9	43°9	43°8	—	—	—	—	—	—	—
—	—	—	44°3	44°2	43°7	43°4	43°3	43°0	42°7	42°5	42°3	41°0	41°4	41°8	42°33
44°8	44°3	44°2	44°3	44°2	43°7	43°4	43°3	43°0	42°3	41°9	41°3	40°1	40°2	40°2	43°43
45°6	45°5	45°8	45°2	45°6	45°4	46°2	46°5	46°6	46°4	45°3	45°1	45°1	44°7	42°5	44°67
44°9	44°6	43°8	43°3	42°2	42°1	42°0	42°0	41°4	41°7	41°6	41°8	41°5	40°9	40°9	43°87
40°2	39°2	37°7	37°5	37°5	38°2	37°2	36°5	35°3	35°1	35°3	35°1	35°1	35°1	34°4	37°88
39°1	38°1	36°7	36°1	36°3	36°0	35°6	34°7	33°9	33°3	34°2	35°4	36°0	35°3	35°3	37°83
40°4	39°0	39°1	39°4	40°2	41°8	42°4	42°5	41°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	28°6	28°4	28°4	28°3	29°2	28°1	35°95
32°7	32°6	32°7	32°8	32°2	32°0	32°9	32°4	35°2	35°7	36°0	36°2	34°9	34°5	34°6	32°37
36°9	34°9	32°0	32°0	29°9	29°8	29°6	28°9	28°6	29°4	27°7	26°3	25°4	24°3	24°1	31°63
19°1	20°0	20°1	20°0	19°6	17°7	16°9	16°7	16°4	16°5	16°5	16°7	19°1	19°1	17°9	18°77
24°9	23°6	22°6	22°7	23°2	23°1	23°0	23°0	24°5	24°5	25°1	25°3	24°1	23°5	22°7	23°28
30°7	31°0	32°0	32°1	33°0	33°2	33°3	33°2	34°3	35°0	34°9	34°7	34°8	36°2	36°4	30°17
38°2	37°3	36°2	35°6	35°3	34°9	34°2	32°6	31°8	—	—	—	—	—	—	33°97
—	—	—	—	—	—	—	—	—	27°9	26°8	26°6	27°7	27°5	27°6	—
26°4	26°1	25°1	23°0	22°0	21°6	20°1	18°5	18°2	16°9	15°4	14°7	13°6	13°2	13°5	21°74
41°31	40°71	40°52	39°55	39°21	39°06	38°79	38°29	38°03	37°21	36°92	36°66	36°40	36°47	36°29	38°83
26°0	26°4	27°2	27°1	27°9	29°1	30°5	29°8	30°6	30°8	31°7	31°7	32°0	32°0	32°4	25°72
41°3	40°9	42°1	43°6	44°4	44°2	42°1	42°1	46°7	45°3	38°8	39°2	36°0	34°7	32°4	39°62
28°8	28°4	28°1	28°4	28°1	27°4	26°3	25°1	23°5	23°3	23°6	23°7	24°0	24°1	23°8	27°55
32°0	32°4	31°6	30°6	30°8	31°2	31°1	31°2	31°0	30°8	30°6	30°9	30°9	29°4	28°6	29°95
32°0	32°1	32°1	30°3	28°4	28°1	28°6	28°2	28°2	—	—	—	—	—	—	—
—	—	—	39°0	38°9	38°6	38°7	38°8	39°0	39°1	38°5	37°7	37°7	37°2	37°4	30°19
37°1	37°5	38°9	31°8	31°8	31°5	31°2	31°2	30°6	30°7	30°7	29°6	28°8	29°7	30°9	36°96
34°4	33°3	32°7	30°3	30°0	29°6	29°4	28°6	29°2	28°6	28°4	28°4	28°4	27°8	26°8	32°61
30°3	30°3	30°7	29°8	29°2	27°2	26°3	26°0	26°4	26°4	26°6	26°1	26°1	26°0	25°1	28°70
32°0	31°2	29°8	27°3	27°5	27°8	27°3	27°2	26°3	25°6	20°8	19°4	18°6	17°7	17°9	24°27
27°3	27°1	27°1	18°8	19°4	20°1	19°9	20°0	19°1	18°1	16°4	15°9	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20°1	19°1	18°6	17°5	17°0	16°0	15°0	12°6	10°4	10°5	11°8	12°1	12°7	8°9	9°3	15°12
22°8	22°2	19°2	16°8	15°2	13°2	11°5	11°3	10°4	10°7	9°4	10°3	11°6	10°8	11°0	14°33
24°6	24°6	21°7	22°0	23°3	25°9	22°6	23°0	21°3	21°3	21°3	21°7	21°7	22°2	21°5	21°33
26°1	25°2	22°1	18°3	16°4	17°4	19°2	18°9	16°3	14°9	15°4	13°8	13°3	13°2	12°6	19°94
27°3	26°8	26°1	26°6	25°6	24°9	27°5	26°3	26°4	26°8	27°3	27°3	27°5	27°1	28°1	23°43
30°6	28°8	28°8	28°2	27°7	27°2	27°2	27°2	27°2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	23°0	22°8	21°5	21°1	21°8	20°9	26°68
23°3	22°8	19°7	15°8	14°3	14°1	14°4	16°4	17°4	18°1	19°2	20°7	22°1	23°5	24°9	19°53
23°4	23°0	20°6	19°2	18°6	20°7	21°4	22°2	21°7	19°7	16°4	8°7	13°2	11°1	8°6	18°80
21°3	21°3	15°6	13°3	16°8	16°3	18°7	15°1	12°4	13°4	14°8	15°0	15°0	16°1	20°4	15°18
32°2	32°2	33°5	33°3	33°6	33°6	33°2	33°7	34°1	—	—	—	—	—	—	—
—	—	—	30°6	31°0	31°6	31°7	32°0	33°7	21°2	21°1	20°3	20°3	19°7	16°8	28°41
30°0	29°2	30°8	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	27°3	27°3	23°5	23°4	22°9	22°8	39°4	38°4	38°1	37°6	37°5	33°6	29°22
28°1	27°9	27°3	26°5	28°4	28°3	28°8	29°6	30°8	23°7	21°9	19°4	20°8	20°5	19°9	26°50
36°7	36°3	35°8	35°3	35°4	34°7	34°3	33°9	33°9	31°5	31°8	31°8	33°7	34°3	35°6	27°10
38°3	38°0	37°7	37°9	37°6	36°3	37°1	36°5	36°4	36°5	36°2	36°3	35°6	35°4	33°8	35°75
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28°88	28°55	27°99	27°20	27°12	26°85	26°73	26°40	26°25	25°80	25°30	24°79	24°94	24°57	24°41	26°16

WET THERMOMETER.													
Hours of Mean Gattingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	35.4	35.2	35.0	34.5	34.4	34.3	34.5	34.1	33.2	33.0	32.4	32.0
	2	33.2	32.9	32.5	32.7	33.4	33.4	34.9	35.0	34.7	33.9	33.5	33.0
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	31.6	31.7	31.6	32.2	32.2	31.7	31.8	32.0	33.1	33.4	33.9	34.4
	5	33.3	32.2	30.6	30.8	30.2	31.8	31.3	31.3	33.9	31.4	32.6	30.7
	6	27.6	28.0	28.3	29.4	32.3	31.5	28.9	28.6	28.1	28.5	28.8	28.3
	7	27.4	26.8	26.4	25.9	25.3	24.9	23.6	22.0	21.5	22.5	21.5	20.0
	8	8.8	7.4	6.3	6.8	7.1	7.7	8.2	9.2	9.3	10.0	9.3	8.9
	9	10.7	10.4	10.7	11.4	12.6	13.5	15.1	17.3	17.2	17.0	16.3	16.1
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	2.7	1.0	0.9	5.5	9.3	9.9	10.2	10.4	11.1	12.2	12.1	11.9
	12	10.9	12.0	12.2	12.8	13.9	15.0	15.1	15.2	15.9	15.5	15.4	14.5
	13	21.9	22.4	23.4	24.7	27.2	26.8	28.5	30.0	31.0	31.0	30.0	30.0
	14	33.5	34.3	35.1	35.1	35.4	36.2	37.5	38.1	37.4	37.4	37.3	36.5
	15	36.0	36.1	36.3	37.7	38.1	38.5	39.9	41.2	41.0	39.7	39.0	39.6
	16	34.1	32.0	29.6	28.5	28.6	28.4	31.6	30.0	25.3	21.0	18.7	15.2
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	27.8	29.3	29.6	30.0	30.5	30.6	30.5	31.0	30.0	28.6	27.9	27.9
	19	9.5	8.9	8.0	7.7	7.8	8.4	8.7	8.4	9.0	8.6	7.5	6.6
	20	5.3	5.3	6.2	8.7	12.3	15.1	17.0	17.5	17.9	18.5	17.7	17.3
	21	12.6	12.2	11.0	11.3	11.3	10.7	8.7	8.7	7.6	5.3	4.7	3.4
	22	6.3	5.8	5.6	7.1	7.3	9.3	9.4	11.4	11.8	10.7	12.8	13.7
	23	19.5	20.3	21.6	23.9	25.3	27.4	28.1	26.3	26.8	26.6	27.3	25.6
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	16.4	16.7	17.1	19.0	22.0	22.8	23.2	23.4	23.6	24.0	23.4	22.4
	26	24.9	28.5	32.0	32.0	32.7	33.9	33.9	31.4	26.8	25.1	24.1	23.4
	27	11.4	11.5	12.1	13.7	13.9	13.7	13.3	13.7	13.6	13.0	11.8	10.5
	28	3.6	4.5	4.5	8.1	11.1	15.5	18.3	19.2	20.5	21.3	20.7	19.5
	29	20.6	22.2	23.1	23.6	25.5	27.9	28.8	29.2	29.4	28.8	27.9	27.4
	30	19.6	19.6	17.5	17.6	17.3	15.1	15.1	15.4	15.4	14.6	14.0	12.8
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	19.97	20.28	20.28	21.18	22.19	22.85	23.31	23.46	23.27	22.75	22.33	21.65	—
FEBRUARY.	1	22.3	23.3	23.5	24.4	26.4	29.4	31.0	31.6	31.6	31.5	31.7	30.7
	2	28.1	28.1	30.4	32.2	36.1	36.2	36.3	37.2	38.0	38.0	36.8	36.4
	3	37.8	37.9	37.7	37.3	37.2	37.1	37.3	37.6	34.4	31.2	27.4	24.1
	4	9.2	9.3	9.0	10.2	11.5	13.6	15.3	18.3	18.9	19.8	19.4	18.1
	5	8.4	7.5	7.6	9.2	11.0	12.4	15.7	16.3	18.9	19.2	19.9	19.8
	6	10.9	10.2	11.1	13.2	14.7	17.0	19.4	21.6	23.0	24.1	24.5	24.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	27.3	27.1	27.1	28.5	29.8	31.6	32.0	32.1	32.1	33.1	32.0	31.0
	9	27.1	25.3	25.3	26.6	28.1	29.6	28.6	29.2	28.4	28.3	28.4	27.6
	10	25.5	25.6	25.5	26.6	28.2	28.7	30.0	31.8	32.0	32.0	30.8	28.6
	11	14.8	15.1	14.2	15.4	18.5	18.9	18.9	20.0	18.8	18.8	18.3	17.3
	12	11.5	13.3	12.4	15.1	18.8	20.6	21.1	22.8	25.1	21.3	18.8	16.8
	13	14.0	13.5	14.0	16.1	18.5	20.5	20.7	21.3	22.3	22.3	21.9	21.7
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	27.9	27.1	25.3	24.2	24.8	22.6	21.4	19.8	19.2	19.2	19.0	17.8
	16	15.6	10.2	15.2	16.5	11.3	11.6	12.4	20.5	21.7	23.4	22.5	19.4
	17	19.6	19.4	20.0	23.0	27.3	29.2	27.5	28.4	28.6	29.6	28.1	28.1
	18	19.2	19.6	20.8	23.7	29.2	31.1	32.0	32.2	32.2	32.0	31.6	29.6
	19	25.5	25.2	25.3	25.7	26.2	28.1	28.5	28.8	31.0	31.4	30.9	30.0
	20	25.3	24.5	24.1	22.2	21.0	20.7	21.4	21.1	20.6	20.9	20.2	20.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	13.3	13.6	13.8	14.4	15.9	17.7	17.5	18.0	18.1	18.5	18.8	18.5
	23	1.0	0.4	1.2	3.6	6.0	8.0	11.0	12.3	13.4	13.9	15.1	14.6
	24	0.1	0.9	3.6	6.8	12.0	16.1	18.9	20.6	20.5	20.6	19.9	19.6
	25	15.2	14.3	14.6	17.9	19.6	20.7	21.8	22.0	23.3	23.1	23.0	22.0
	26	6.2	7.6	14.6	18.9	23.5	24.5	24.8	24.9	24.6	23.6	23.2	22.4
	27	25.9	26.1	27.6	26.8	27.7	28.7	29.4	29.5	30.7	30.7	31.7	32.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	17.99	17.60	18.49	19.94	21.80	23.11	23.87	24.91	25.31	25.27	24.75	23.75	—

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
4	5	6	7	8	9	10	11	12	13	14	15	16	17	17	
33°0	32°4	32°0	31°6	31°2	31°4	31°1	31°8	33°0	34°3	34°1	34°9	35°1	34°6	33°2	33°51
33°9	33°5	33°0	32°7	32°6	32°2	31°8	31°9	31°9	—	—	—	—	—	—	31°94
—	—	—	—	—	—	—	—	—	24°7	24°1	23°6	30°1	31°8	31°1	—
33°4	33°9	34°4	34°4	36°2	35°8	38°1	38°9	40°6	39°0	37°4	36°2	35°5	35°3	34°3	34°64
31°4	32°6	30°7	31°4	32°0	31°8	31°8	31°8	31°0	31°0	30°3	31°0	28°7	27°9	27°5	31°09
28°5	28°8	28°3	26°6	27°9	27°3	27°4	26°8	26°4	26°3	26°3	26°4	26°8	27°3	27°5	27°97
22°5	21°5	20°0	16°6	15°1	14°3	14°0	13°7	12°3	13°0	12°6	12°0	13°4	13°2	11°8	18°74
10°0	9°3	8°9	9°2	9°1	8°8	8°3	7°5	7°6	7°9	8°7	8°8	9°1	9°5	9°5	8°46
17°0	16°3	16°1	15°9	15°6	16°0	15°7	15°2	15°1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	6°1	4°7	2°5	—	1°7	—	—
12°2	12°1	11°9	11°5	10°7	10°7	10°6	10°7	11°0	—	—	—	—	—	—	—
15°5	15°4	14°5	12°6	12°2	13°0	13°7	14°1	13°9	13°1	19°2	19°6	19°5	21°1	21°9	15°10
31°0	30°0	30°0	29°6	29°4	29°3	29°9	30°0	31°0	32°1	33°4	33°5	33°9	33°3	33°3	29°40
37°4	37°3	36°3	36°2	35°9	35°0	35°2	35°4	35°2	33°3	34°5	34°2	34°6	35°4	36°3	35°62
39°7	39°0	39°6	40°5	40°5	42°1	41°6	41°4	41°4	40°2	39°7	38°5	37°4	36°0	34°5	39°04
21°0	18°7	15°2	13°7	12°5	11°4	11°2	10°7	10°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	20°3	20°9	22°0	23°5	24°3	25°9	22°07
28°6	27°9	27°9	27°9	28°4	27°1	26°8	25°4	23°7	21°6	18°7	17°1	15°2	12°5	12°2	25°43
8°6	7°5	6°6	6°5	5°8	5°7	5°9	6°0	6°1	6°1	6°1	5°9	5°9	5°6	5°4	7°09
18°5	17°7	17°3	17°1	16°6	16°3	15°4	15°5	14°2	13°1	12°4	13°1	13°0	12°8	13°0	13°80
5°3	4°7	3°4	3°6	2°3	3°2	4°6	4°7	4°5	4°6	4°8	5°2	5°2	5°8	5°8	6°76
10°7	12°8	13°7	13°1	12°1	13°3	14°2	16°2	17°2	17°5	17°7	17°6	17°4	17°7	19°1	12°68
26°6	27°3	25°6	25°1	23°9	23°0	21°6	20°5	20°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	15°9	15°9	16°2	16°2	16°0	15°6	22°05
24°0	23°4	22°8	23°2	23°2	24°2	24°7	25°4	24°4	23°5	23°3	26°4	26°7	25°9	24°6	22°91
25°1	24°1	23°8	23°9	21°8	21°6	19°6	19°2	19°8	19°9	17°1	15°4	15°2	13°8	12°8	23°72
13°0	11°8	10°5	8°5	7°0	5°8	5°2	4°1	4°3	4°1	3°6	3°2	2°1	2°8	2°7	8°58
21°3	20°7	19°5	19°0	17°3	17°5	17°0	15°9	19°0	17°1	17°9	18°6	19°1	19°2	19°8	16°01
28°8	27°9	27°4	27°3	26°8	26°3	25°5	24°7	23°1	21°3	21°1	21°6	21°7	21°8	21°0	24°86
14°6	14°0	12°8	10°8	9°8	9°2	9°2	9°2	9°2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	22°0	19°6	19°8	20°5	21°1	21°4	15°66
22°75	22°33	21°65	21°10	20°60	20°47	20°38	20°27	20°27	20°32	19°81	19°99	19°83	19°78	19°57	21°08
31°5	31°7	30°7	30°7	30°6	30°8	30°0	29°4	29°4	30°1	28°6	27°4	29°2	29°4	28°5	28°81
38°0	36°8	36°4	37°5	37°9	37°4	37°0	36°9	36°7	37°4	37°1	37°2	37°4	36°9	36°7	35°83
31°2	27°4	24°1	21°5	18°9	16°9	16°2	15°0	13°7	14°1	14°2	12°6	11°8	11°0	9°5	24°68
19°8	19°4	18°1	17°0	15°9	15°6	14°5	13°7	13°2	12°6	12°0	11°5	11°2	10°7	9°5	13°75
19°2	19°9	19°8	19°6	19°0	17°9	17°4	16°7	15°7	15°5	15°5	13°5	13°2	11°8	11°0	14°69
24°1	24°5	24°0	22°5	20°7	20°1	19°0	18°3	18°5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	19°0	24°4	25°2	25°9	25°7	24°9	19°91
33°1	32°0	31°0	30°6	30°6	30°5	31°3	31°4	31°8	31°8	31°0	30°7	30°5	30°8	28°8	30°56
28°3	28°4	27°6	27°2	26°3	26°4	27°2	27°6	26°4	27°5	23°2	21°1	19°4	22°0	24°6	26°31
32°0	30°8	28°6	27°9	25°5	24°9	22°0	18°5	16°0	14°3	11°5	10°3	13°6	14°0	14°2	23°25
18°8	18°3	17°3	17°0	16°2	15°4	14°7	15°5	16°0	15°9	15°6	15°6	14°7	12°8	10°7	16°21
21°3	18°8	16°8	16°0	15°3	14°8	14°3	13°5	8°2	8°7	11°0	12°4	14°2	15°4	15°4	15°70
22°3	21°9	21°7	21°6	20°4	20°6	20°1	20°1	20°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	29°4	29°3	29°4	29°6	28°8	28°5	21°87
19°2	19°0	17°8	17°7	17°3	16°7	16°1	14°7	13°8	13°8	14°3	16°7	17°4	16°8	16°8	19°18
23°4	22°5	19°4	19°6	21°3	21°1	22°2	18°7	17°7	17°6	18°4	18°0	18°0	18°4	18°1	17°89
29°6	28°1	28°1	26°6	24°5	22°6	20°2	17°9	17°5	15°1	14°4	14°7	14°7	17°3	18°5	22°20
32°0	31°6	29°6	28°3	28°4	27°5	26°3	25°9	26°3	26°3	26°1	26°1	26°3	25°5	26°7	27°20
31°4	30°9	30°0	29°7	29°5	29°3	29°3	29°2	28°6	28°3	28°3	28°1	27°2	26°8	25°9	28°20
20°9	20°2	20°0	20°0	20°0	19°6	19°4	18°9	19°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	16°0	15°6	14°8	14°0	14°1	13°7	19°46
18°5	18°8	18°5	18°1	17°1	14°7	13°1	8°6	7°7	6°9	5°4	4°7	3°8	2°9	1°9	12°63
13°9	15°1	14°6	8°0	2°5	1°2	3°2	4°0	2°0	—	—	—	—	—	—	—
20°6	19°9	19°6	19°0	18°9	20°1	19°6	18°7	18°7	19°2	18°7	18°1	18°1	17°8	17°4	15°92
23°1	23°0	22°0	18°9	12°8	9°5	10°7	10°3	9°5	9°5	9°3	6°8	5°8	5°8	8°4	14°78
23°6	23°2	22°4	23°6	23°4	24°1	25°6	25°1	26°6	27°1	27°3	27°1	27°2	27°2	27°2	22°97
30°7	31°7	32°0	33°1	32°9	32°0	31°2	30°8	30°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	19°1	17°4	17°9	18°5	18°3	17°6	26°91
25°27	24°75	23°75	22°99	21°91	21°24	20°86	20°02	19°32	18°91	18°72	18°38	18°47	18°37	18°11	21°00

WET THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	1	18°5	18°6	19°8	20°8	20°8	22°6	24°6	26°5	27°4	25°8	25°1	24°5
	2	17°4	17°1	19°2	20°7	21°1	22°0	24°6	27°1	26°8	26°4	26°3	24°2
	3	21°6	25°1	26°4	27°9	29°4	30°8	32°4	31°1	31°8	31°7	32°0	32°0
	4	13°0	13°3	20°2	23°8	24°5	25°1	26°8	28°1	29°4	29°4	28°8	28°1
	5	12°1	9°8	12°6	17°7	23°6	26°0	26°2	27°3	28°2	27°9	27°9	27°1
	6	27°1	27°8	30°3	30°5	32°0	32°7	32°5	32°3	31°8	31°4	31°4	32°5
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	23°5	23°2	25°5	26°5	28°4	31°7	32°2	33°5	28°9	28°5	27°3	27°2
	9	16°4	16°5	16°5	18°6	19°9	19°9	19°7	19°1	19°3	19°6	19°7	19°9
	10	21°9	22°5	26°2	28°6	31°0	31°0	31°2	31°0	31°9	32°7	33°8	33°5
	11	14°0	14°3	15°9	17°1	17°7	18°3	20°2	19°7	20°0	19°8	18°6	18°1
	12	5°7	6°3	9°9	13°8	14°7	15°9	16°7	17°1	18°3	20°2	19°8	19°2
	13	8°9	8°7	11°1	13°3	15°6	17°6	19°1	20°1	21°7	23°0	21°5	21°5
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	11°9	13°3	14°7	16°0	17°3	20°1	18°3	20°6	21°1	19°8	19°2	19°0
	16	9°0	9°2	11°6	13°2	15°9	16°6	19°4	18°1	21°2	20°9	20°4	20°2
	17	13°7	15°2	18°1	22°6	23°9	27°8	29°2	29°1	29°2	29°1	29°2	28°1
	18	27°3	27°5	30°0	31°5	30°6	32°2	33°3	31°1	35°5	35°6	36°5	37°1
	19	22°2	23°5	25°3	27°1	29°4	30°6	32°0	32°2	32°1	32°1	32°0	30°1
	20	30°4	31°0	31°2	32°4	34°1	34°2	35°6	36°5	35°4	35°6	35°4	35°1
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	24°5	25°9	27°0	29°2	29°8	30°0	30°5	29°6	29°9	30°0	30°1	30°5
	23	22°2	33°0	33°1	33°3	34°3	35°3	37°8	36°6	37°1	36°2	35°2	34°7
	24	26°0	26°8	27°8	29°7	29°8	31°8	31°4	31°4	31°9	32°7	33°2	31°7
	25	30°7	30°4	35°3	38°5	38°1	38°1	37°9	35°1	35°8	35°8	35°4	36°7
	26	27°3	27°8	28°0	28°4	28°9	30°3	31°6	31°9	31°5	32°7	33°3	32°7
	27	16°7	15°5	15°7	17°1	19°0	20°3	21°1	21°5	21°9	22°2	22°2	22°5
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	29°4	30°9	32°3	35°3	37°0	38°2	36°7	37°1	34°1	32°7	31°4	29°8
	30	21°2	21°2	23°9	23°3	23°7	24°3	23°7	22°6	22°9	23°0	21°6	21°1
	31	11°6	14°4	15°2	15°0	16°9	17°9	19°8	21°2	22°3	22°1	21°9	22°3
Hourly Means	19°78	20°34	22°35	24°14	25°49	26°71	27°59	27°84	28°17	28°04	27°75	27°46	
APRIL.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	—	—	—	—	—	—	—	—	—	—	—	
	5	—	—	—	—	—	—	—	—	—	—	—	
	6	—	—	—	—	—	—	—	—	—	—	—	
	7	—	—	—	—	—	—	—	—	—	—	—	
	8	—	—	—	—	—	—	—	—	—	—	—	
	9	—	—	—	—	—	—	—	—	—	—	—	
	10	—	—	—	—	—	—	—	—	—	—	—	
	11	—	—	—	—	—	—	—	—	—	—	—	
	12	—	—	—	—	—	—	—	—	—	—	—	
	13	—	—	—	—	—	—	—	—	—	—	—	
	14	—	—	—	—	—	—	—	—	—	—	—	
	15	—	—	—	—	—	—	—	—	—	—	—	
	16	—	—	—	—	—	—	—	—	—	—	—	
	17	—	—	—	—	—	—	—	—	—	—	—	
	18	—	—	—	—	—	—	—	—	—	—	—	
	19	—	—	—	—	—	—	—	—	—	—	—	
	20	—	—	—	—	—	—	—	—	—	—	—	
	21	—	—	—	—	—	—	—	—	—	—	—	
	22	—	—	—	—	—	—	—	—	—	—	—	
	23	—	—	—	—	—	—	—	—	—	—	—	
	24	—	—	—	—	—	—	—	—	—	—	—	
	25	—	—	—	—	—	—	—	—	—	—	—	
	26	—	—	—	—	—	—	—	—	—	—	—	
	27	—	—	—	—	—	—	—	—	—	—	—	
	28	—	—	—	—	—	—	—	—	—	—	—	
	29	—	—	—	—	—	—	—	—	—	—	—	
	30	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	—	—	—	—	—	—	—	—	—	—	—	—	

* No reliable observations for this month.

WET THERMOMETER.

[illegible][illegible]

WET THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	37.1	41.6	44.5	45.3	47.8	48.5	48.2	46.9	45.6	45.8	45.9
	5	35.1	42.6	45.5	47.7	49.4	50.5	50.7	51.2	50.6	50.1	50.3
	6	39.9	44.3	47.0	48.6	49.1	50.7	52.6	52.5	52.7	50.6	49.7
	7	41.4	45.4	48.1	49.2	50.2	50.4	51.9	52.1	53.7	50.0	49.8
	8	44.4	45.6	46.7	48.6	48.4	47.4	47.8	48.6	51.6	52.5	52.5
	9	—	—	—	—	—	—	—	—	—	—	—
	10	45.4	47.8	50.2	51.1	52.7	53.7	53.5	54.1	56.0	55.9	57.0
	11	52.0	52.0	53.1	57.0	58.6	59.4	57.9	57.8	57.5	58.5	56.2
	12	53.6	54.4	57.1	58.2	59.8	60.7	61.7	60.8	59.1	59.0	58.8
	13	52.8	54.2	54.7	53.7	53.3	52.3	52.7	54.7	54.9	55.7	56.2
	14	48.8	52.0	54.6	53.1	51.4	52.2	51.3	50.4	50.8	52.5	52.4
	15	46.2	50.8	54.9	56.8	56.7	58.6	58.6	58.8	59.0	59.1	57.9
	16	—	—	—	—	—	—	—	—	—	—	—
	17	43.9	48.3	53.8	55.3	55.4	55.5	54.9	55.8	54.7	54.1	54.2
	18	41.7	49.4	52.9	57.4	57.8	57.8	59.1	60.2	58.0	58.3	58.2
	19	47.3	49.4	51.8	53.9	59.4	57.1	56.6	58.0	58.3	57.1	57.3
	20	45.3	47.1	49.0	51.8	51.9	52.4	53.1	53.7	53.9	53.4	53.3
	21	46.5	47.7	48.4	50.1	49.9	51.8	53.9	56.4	56.8	57.4	57.4
	22	56.3	59.4	57.8	59.6	61.9	64.1	63.5	60.8	62.7	62.9	60.9
	23	—	—	—	—	—	—	—	—	—	—	—
	24	55.1	56.7	57.1	56.9	57.5	58.4	58.7	60.6	62.0	61.6	61.8
	25	50.2	52.8	55.9	59.2	59.1	59.9	58.4	60.9	60.8	59.3	56.7
	26	36.6	38.3	40.3	41.9	43.0	46.1	47.7	47.6	48.0	50.0	51.4
	27	44.6	48.8	50.6	50.4	52.3	53.6	53.0	51.5	53.1	52.4	52.7
	28	50.6	51.2	53.4	53.4	58.6	61.4	61.8	64.0	64.2	62.0	60.9
	29	54.7	52.9	53.7	59.1	57.0	57.5	55.9	56.4	59.0	61.7	58.0
	30	—	—	—	—	—	—	—	—	—	—	—
	31	47.8	47.0	47.0	46.5	45.3	44.8	44.2	44.0	43.9	43.8	44.0
Hourly Means	46.68	49.15	51.17	52.70	53.60	54.37	54.61	54.91	55.29	55.15	54.60	54.85
JUNE.	1	45.6	45.6	48.2	52.2	51.9	59.2	59.8	58.2	57.8	54.6	56.1
	2	50.6	50.6	51.6	52.0	53.9	55.3	56.9	58.7	56.5	56.5	56.4
	3	48.2	54.1	54.7	54.6	55.2	56.6	59.2	58.7	55.8	56.4	55.3
	4	53.0	54.2	55.8	54.1	54.2	55.1	58.1	58.5	52.0	51.0	49.0
	5	40.1	42.0	45.4	46.3	48.4	50.5	52.4	54.9	55.5	56.9	54.2
	6	—	—	—	—	—	—	—	—	—	—	—
	7	47.8	51.4	56.3	58.5	58.2	59.2	59.8	61.2	61.3	61.4	58.5
	8	52.1	51.4	51.4	52.6	55.1	55.2	51.8	54.9	57.1	58.0	56.8
	9	55.9	57.8	60.6	63.5	63.8	65.0	65.6	68.5	69.6	69.3	69.6
	10	61.8	62.0	63.0	63.0	62.4	62.0	62.6	62.5	63.2	64.0	62.0
	11	57.4	60.0	62.6	64.6	62.0	64.6	61.0	62.1	59.0	58.5	57.8
	12	46.7	48.8	54.7	56.3	55.6	56.3	56.6	58.0	58.5	58.9	60.0
	13	—	—	—	—	—	—	—	—	—	—	—
	14	54.5	53.2	48.6	49.0	47.4	46.7	45.0	43.2	42.2	44.7	44.0
	15	38.0	39.1	40.1	41.2	42.8	43.9	44.9	47.6	50.4	52.0	52.3
	16	43.2	44.9	46.3	47.5	48.6	49.7	49.0	48.8	50.3	50.6	50.6
	17	46.8	48.4	52.4	55.9	55.7	56.2	57.5	57.2	56.9	58.0	58.3
	18	49.0	53.3	53.3	55.4	56.9	57.8	59.0	61.0	58.0	57.2	56.4
	19	55.3	55.3	57.2	59.3	61.6	61.2	60.6	60.8	57.4	58.7	61.2
	20	—	—	—	—	—	—	—	—	—	—	—
	21	53.8	56.4	59.7	61.0	61.5	61.2	62.3	62.2	57.5	60.7	62.9
	22	52.5	53.9	52.5	57.4	59.6	63.0	63.8	64.6	64.0	60.4	58.5
	23	55.1	58.2	59.6	63.0	63.4	65.4	65.4	65.5	65.0	65.4	64.8
	24	55.5	60.6	62.8	64.5	66.4	68.4	65.9	63.8	65.0	67.1	66.2
	25	56.7	61.5	60.5	62.6	62.8	62.6	64.0	64.8	65.0	66.6	65.1
	26	61.6	63.7	67.9	69.7	70.1	72.3	70.9	70.7	69.5	70.3	69.1
	27	—	—	—	—	—	—	—	—	—	—	—
	28	58.7	58.7	56.7	58.1	59.2	59.3	62.0	66.3	61.0	60.8	61.3
	29	54.3	55.5	56.1	58.0	59.0	60.3	60.6	61.4	64.0	63.2	63.0
	30	53.9	57.4	61.7	62.8	63.4	62.0	64.2	65.1	65.0	64.0	63.9
Hourly Means	51.85	53.77	55.38	57.04	57.75	58.77	59.14	59.78	59.04	59.42	58.97	58.30

9	10	11
3	4	5
—	—	—
—	—	—
—	—	—
45°8	45°9	46°2
50°1	50°3	—
50°6	49°7	47°5
50°0	49°8	51°6
52°5	52°5	51°9
—	—	—
55°9	57°0	55°7
58°5	56°2	56°3
59°0	58°8	58°6
55°7	56°2	55°9
52°5	52°4	54°8
59°1	57°9	57°1
—	—	—
54°1	54°2	53°3
58°3	58°2	58°5
57°1	57°3	58°5
53°4	53°3	51°8
57°4	54°4	52°7
62°9	60°9	58°6
—	—	—
61°6	61°8	61°4
59°3	56°7	58°0
50°0	51°4	50°6
52°4	52°7	53°6
62°0	60°9	61°7
61°7	58°0	62°8
—	—	—
13°8	44°0	44°0
55°15	54°60	54°30
—	—	—
54°6	56°1	56°5
56°5	56°4	57°2
56°4	55°3	55°5
51°0	49°0	48°0
56°9	54°2	54°1
—	—	—
61°4	58°5	56°5
58°0	56°8	55°1
69°3	69°6	67°0
64°0	62°0	62°2
58°5	57°8	53°1
58°9	60°0	59°6
—	—	—
44°7	44°0	41°
52°0	52°3	51°8
50°3	50°6	50°6
58°0	58°3	57°3
57°2	56°4	56°3
58°7	61°2	62°8
—	—	—
60°7	62°9	62°8
60°4	58°5	60°1
65°4	64°8	62°8
67°1	66°2	66°5
66°6	65°1	60°4
70°3	69°1	69°1
—	—	—
60°8	61°3	61°5
63°2	63°0	63°6
64°0	63°9	63°0
59°42	58°97	58°30

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	17	
6	7	8	9	10	11	12	13	14	15	16	17	17	
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
44°7	43°5	42°9	41°3	39°9	36°8	36°5	38°7	38°1	36°2	33°7	31°9	41°98	41°98
46°7	44°5	44°3	41°8	39°5	38°0	38°1	36°5	35°8	35°5	34°6	34°7	43°20	43°20
46°6	44°9	43°7	42°8	42°8	41°7	40°7	39°9	39°1	38°3	37°7	36°6	45°00	45°00
49°8	46°3	45°9	44°2	43°8	45°6	46°1	46°7	47°1	49°9	52°2	52°7	48°50	48°50
50°5	49°9	49°5	49°3	49°6	48°9	—	—	—	—	—	—	48°70	48°70
—	—	—	—	—	—	47°7	47°4	48°5	49°6	47°3	44°7	—	—
53°8	54°7	53°6	52°9	52°1	54°3	54°4	53°9	52°9	51°2	52°7	53°3	53°04	53°04
56°1	53°0	52°5	53°1	53°1	53°5	53°7	53°3	53°1	52°7	53°7	55°0	54°96	54°96
57°8	58°4	58°4	58°6	57°8	57°8	55°7	56°5	55°4	53°9	51°4	52°9	57°35	57°35
53°7	54°2	53°0	50°0	49°0	48°5	47°8	47°3	47°0	46°7	46°4	45°7	51°77	51°77
51°4	52°1	49°6	48°4	46°9	46°7	44°6	43°0	42°4	41°3	41°6	40°9	48°88	48°88
56°1	55°9	52°6	49°6	49°4	49°2	—	—	—	—	—	—	52°15	52°15
—	—	—	—	—	—	45°7	45°9	45°4	43°5	42°4	41°1	—	—
52°0	50°6	51°0	50°6	49°6	47°7	47°5	47°2	44°9	43°3	42°6	42°4	50°36	50°36
57°4	51°5	50°8	49°6	49°3	48°2	48°0	47°7	47°8	47°8	47°2	46°7	52°68	52°68
59°9	55°0	52°2	50°3	50°0	49°5	48°5	47°9	47°1	46°1	45°4	45°9	52°60	52°60
51°1	50°7	50°0	47°8	46°9	45°9	44°9	44°6	43°2	42°9	42°6	43°6	48°79	48°79
53°8	51°7	53°1	48°2	47°4	50°7	50°7	52°9	51°2	51°6	52°4	53°6	51°81	51°81
57°8	58°1	57°7	57°9	56°7	55°5	—	—	—	—	—	—	57°60	57°60
—	—	—	—	—	—	52°4	51°0	51°0	51°2	51°1	53°5	—	—
60°2	58°6	57°8	55°5	55°0	52°9	51°6	49°2	48°6	48°4	47°1	48°1	55°87	55°87
57°9	58°2	57°3	54°8	55°3	44°2	41°9	40°1	38°2	37°3	36°4	35°2	52°00	52°00
49°8	45°5	44°6	43°5	42°4	40°8	39°4	39°1	39°7	39°5	36°4	37°0	43°30	43°30
52°9	50°7	49°0	47°6	46°9	45°5	45°0	43°5	42°6	42°2	44°0	45°1	48°82	48°82
61°7	57°9	57°1	58°0	58°3	56°9	56°7	56°7	55°0	55°5	55°5	55°2	57°95	57°95
58°4	55°3	54°1	54°0	52°9	53°1	—	—	—	—	—	—	54°11	54°11
—	—	—	—	—	—	45°7	45°3	46°6	47°4	48°5	48°7	—	—
44°6	44°6	41°6	45°6	46°0	46°6	47°1	46°8	46°9	47°0	47°4	47°2	45°70	45°70
53°61	51°91	51°05	49°82	49°19	48°28	47°10	46°71	46°15	45°79	45°43	45°49	50°73	50°73
—	—	—	—	—	—	—	—	—	—	—	—	—	—
55°5	55°3	53°7	52°8	52°3	51°2	50°6	49°2	48°8	48°2	49°8	50°2	52°76	52°76
56°4	53°7	52°5	51°3	50°9	48°3	47°5	46°5	44°9	44°8	43°8	44°4	51°72	51°72
53°9	53°0	52°7	52°7	51°2	51°6	52°5	52°3	53°1	53°1	52°7	52°5	53°90	53°90
47°8	46°9	45°1	44°2	42°8	42°0	40°7	40°0	37°4	36°1	35°1	34°7	46°91	46°91
52°7	52°7	50°0	48°4	46°0	44°2	—	—	—	—	—	—	48°38	48°38
—	—	—	—	—	—	46°5	46°5	44°7	44°0	42°	42°6	—	—
53°8	52°5	52°3	52°0	51°5	52°3	51°6	51°	50°6	51°2	51°4	51°9	54°70	54°70
54°3	54°1	53°9	53°9	54°7	54°3	54°3	54°7	55°	53°3	52°9	52°9	54°29	54°29
67°1	67°5	65°6	62°4	63°1	61°4	63°	61°7	61°	60°9	59°8	59°6	63°87	63°87
61°2	61°0	59°8	60°1	58°8	58°2	59°3	60°0	59°5	59°8	57°4	56°5	60°96	60°96
50°6	48°5	49°0	48°0	47°9	48°2	48°0	—	47°5	46°3	45°1	44°9	53°89	53°89
59°3	56°6	53°1	52°7	52°2	51°5	—	—	—	—	—	—	54°20	54°20
—	—	—	—	—	—	51°3	51°1	50°7	50°7	50°9	50°7	—	—
44°1	43°5	41°5	39°5	38°6	38°0	37°8	37°5	37°6	37°6	37°2	37°4	43°05	43°05
51°2	49°6	47°7	46°1	44°8	44°6	44°6	44°2	44°7	43°5	42°3	42°1	45°39	45°39
50°4	50°6	50°6	45°1	44°6	44°3	43°3	43°3	42°6	42°3	40°5	41°7	46°60	46°60
56°2	56°1	50°7	47°9	45°7	45°2	43°9	43°0	41°7	41°3	42°8	44°9	50°83	50°83
55°7	55°9	56°8	57°7	57°4	57°9	57°8	56°0	56°1	56°2	55°9	55°9	56°33	56°33
62°2	55°6	53°7	52°0	50°6	50°2	—	—	—	—	—	—	55°94	55°94
—	—	—	—	—	—	52°5	51°1	51°4	50°6	50°8	50°6	—	—
61°8	58°0	56°2	55°2	55°3	51°9	53°9	52°1	50°6	49°1	48°8	51°1	57°04	57°04
59°9	57°9	56°1	55°0	54°9	54°0	53°7	53°7	53°4	53°3	49°0	50°6	56°74	56°74
62°9	60°7	59°0	57°8	57°0	56°9	54°3	52°3	50°6	49°8	50°0	50°2	58°96	58°96
65°6	64°0	63°2	56°5	54°7	54°3	53°2	52°5	51°8	51°8	51°4	53°1	60°20	60°20
62°2	60°0	59°6	57°3	57°0	58°5	59°6	60°3	59°9	60°1	59°6	57°8	61°02	61°02
66°8	65°2	65°0	65°8	64°3	62°2	—	—	—	—	—	—	65°59	65°59
—	—	—	—	—	—	66°6	64°0	57°9	57°3	56°7	57°5	—	—
60°9	59°4	58°6	56°2	55°2	55°4	54°6	54°0	53°2	53°1	53°4	52°9	57°85	57°85
59°9	58°8	55°7	53°7	53°9	53°3	51°4	50°6	50°6	50°6	50°2	50°9	56°57	56°57
61°8	59°8	56°2	54°3	52°9	51°8	50°8	49°0	48°1	47°5	47°2	48°0	57°24	57°24
57°47	56°01	54°47	53°02	52°24	51°83	51°68	50°95	50°16	49°70	49°12	49°45	54°81	54°81

WET THERMOMETER.											
Hours of Mean Cooling Time.	0	1	2	3	4	5	6	7	8	9	10
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4
JULY.	1	51°1	54°5	57°4	61°4	66°0	65°0	66°5	66°5	65°5	64°2
	2	54°4	58°8	62°0	67°5	67°0	66°6	67°7	69°0	68°7	69°3
	3	58°2	62°8	68°3	68°9	70°0	70°4	69°6	70°3	70°8	70°9
	4	—	—	—	—	—	—	—	—	—	—
	5	60°2	62°6	65°0	70°6	71°0	70°4	71°4	71°4	71°4	67°1
	6	62°4	64°8	64°6	65°8	66°6	68°3	69°3	71°5	73°6	72°7
	7	62°9	64°3	65°3	69°4	70°0	72°0	72°5	72°5	73°0	73°2
	8	65°5	68°3	71°0	73°7	71°9	73°7	73°5	73°7	72°1	71°9
	9	65°4	68°3	70°9	72°2	72°0	74°3	73°0	73°2	72°6	72°1
	10	64°8	66°6	67°3	68°7	69°4	70°7	69°8	71°1	71°5	70°5
	11	—	—	—	—	—	—	—	—	—	—
	12	66°6	70°7	71°9	72°7	73°5	74°7	73°6	76°2	77°0	75°7
	13	66°2	69°7	70°4	73°3	72°1	72°7	72°9	72°3	70°3	68°7
	14	52°9	54°7	56°7	58°2	58°6	61°0	61°0	62°8	62°0	60°4
	15	53°3	56°5	59°8	62°7	65°0	66°2	68°1	68°9	68°4	68°9
	16	63°0	66°3	68°4	69°8	71°5	72°1	71°9	73°1	72°5	71°9
	17	67°9	68°4	69°9	72°5	74°7	75°1	76°1	74°7	76°1	72°7
	18	—	—	—	—	—	—	—	—	—	—
	19	70°0	73°7	76°2	75°9	77°2	78°2	78°8	77°0	74°9	77°2
	20	69°1	72°0	74°2	73°5	75°1	73°3	74°9	75°1	74°7	76°1
	21	68°5	71°2	70°3	71°4	73°5	74°7	73°9	74°4	75°5	73°5
	22	68°1	66°4	66°4	64°7	64°8	64°8	66°5	67°9	65°8	66°0
	23	51°7	56°6	61°1	64°2	64°4	64°8	64°8	63°9	63°0	65°0
	24	57°3	60°8	64°4	65°6	64°4	64°8	64°8	64°2	65°3	66°6
	25	—	—	—	—	—	—	—	—	—	—
	26	56°1	54°9	53°5	51°8	52°0	52°1	52°0	55°3	53°5	53°3
	27	47°7	50°2	52°1	54°7	55°3	56°1	57°3	57°3	56°2	57°3
	28	48°5	52°9	55°5	57°3	59°8	58°2	56°7	59°0	57°5	57°2
	29	55°7	59°1	60°6	61°9	62°7	63°9	61°0	63°4	63°6	65°7
	30	55°0	57°9	58°3	58°3	62°2	60°3	60°8	60°3	62°0	62°8
	31	50°6	58°4	60°6	62°0	63°4	63°3	65°0	62°2	62°2	62°8
Aug. 1	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	59°74	62°64	64°52	66°25	67°11	67°69	68°01	68°41	68°14	67°99	67°29
AUGUST.	2	51°2	57°3	60°0	61°8	63°4	61°4	64°4	65°8	64°0	64°9
	3	53°3	58°2	59°4	63°1	62°6	62°4	63°0	62°8	62°0	62°7
	4	56°7	61°0	65°3	61°8	64°0	65°7	66°0	65°8	67°2	67°5
	5	57°9	61°1	64°4	66°6	66°5	65°7	66°4	66°6	66°6	65°4
	6	60°5	61°7	64°0	66°3	69°9	69°7	69°9	69°1	68°7	69°4
	7	55°7	55°9	58°2	60°0	62°6	66°0	65°9	66°0	61°7	61°1
	8	—	—	—	—	—	—	—	—	—	—
	9	62°4	62°8	63°6	65°0	65°4	66°6	68°1	69°7	69°7	70°6
	10	64°2	65°8	67°2	69°6	71°8	72°1	71°7	72°0	72°5	70°9
	11	65°8	66°6	68°1	67°4	67°7	69°7	70°2	70°7	68°5	65°6
	12	57°1	58°4	63°4	66°5	70°1	70°3	70°4	70°7	70°7	70°3
	13	62°8	65°4	70°1	69°7	71°1	70°7	69°7	69°2	71°1	69°2
	14	65°8	68°3	69°9	71°4	73°7	73°7	74°0	75°1	72°7	74°7
	15	—	—	—	—	—	—	—	—	—	—
	16	67°1	69°4	70°5	71°0	70°2	71°3	74°0	74°2	73°7	73°7
	17	64°3	71°3	72°1	72°6	73°3	70°7	71°7	69°2	70°1	69°5
	18	53°7	55°5	55°5	56°1	56°3	55°9	56°7	58°0	57°3	58°0
	19	44°9	47°7	51°4	50°6	53°1	52°3	53°2	53°4	53°9	55°4
	20	52°1	55°7	58°1	59°0	60°7	61°5	62°6	61°0	61°2	59°8
	21	50°6	52°0	54°6	57°1	56°6	57°3	58°2	58°9	59°9	60°2
	22	—	—	—	—	—	—	—	—	—	—
	23	50°7	55°2	58°0	58°8	57°3	59°2	61°0	62°0	63°0	64°8
	24	51°0	54°9	57°2	61°0	61°6	62°4	63°8	62°6	62°1	61°4
	25	50°4	54°1	61°2	63°5	64°6	64°4	63°2	62°4	62°7	62°2
	26	52°5	56°9	61°0	63°9	65°0	68°7	66°9	69°1	68°3	69°0
	27	54°5	54°8	55°1	56°1	55°9	56°8	57°3	57°8	59°0	59°1
	28	46°5	52°0	58°5	60°8	61°8	60°8	61°4	60°0	60°9	60°0
	29	—	—	—	—	—	—	—	—	—	—
	30	58°0	63°0	63°6	66°0	66°3	66°8	66°0	66°5	65°8	64°6
	31	50°0	52°7	54°0	52°5	53°7	53°5	54°5	54°9	54°7	56°7
Hourly Means	56°14	59°14	61°71	63°12	64°05	64°69	65°01	65°18	65°04	64°99	64°64

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
61.2	61.2	61.6	63.6	61.6	58.6	55.7	53.9	53.6	53.3	52.6	53.5	53.2	52.6	51.2	58.75
69.0	69.3	69.7	69.4	64.8	62.0	60.0	59.1	58.3	56.5	55.9	55.3	54.8	53.3	53.5	62.19
70.2	70.9	71.6	70.5	67.3	64.2	59.6	57.1	56.6	—	—	—	—	—	—	63.87
71.7	67.1	65.9	—	—	—	—	—	—	57.0	56.5	55.9	55.5	55.3	55.4	66.22
72.7	75.6	70.0	66.6	66.3	66.4	65.6	65.1	63.8	64.2	63.2	62.6	62.6	62.2	62.0	65.95
73.2	72.4	73.5	68.8	67.8	64.6	63.6	62.6	62.4	63.0	61.6	60.4	61.4	60.6	60.9	67.18
71.9	71.1	71.9	70.7	68.5	66.4	64.6	64.0	63.7	64.5	63.5	61.1	60.8	61.8	61.8	68.83
72.1	70.0	69.1	70.9	71.6	68.5	66.6	65.7	66.0	65.7	65.1	64.8	63.4	62.8	63.1	68.62
70.5	70.1	68.7	69.3	68.5	66.8	66.5	65.8	65.2	65.2	64.8	65.8	65.6	65.2	65.0	67.53
—	—	—	68.8	66.6	67.2	66.6	66.6	66.0	—	—	—	—	—	—	70.22
75.7	74.1	72.7	74.3	73.1	70.3	68.3	66.8	66.6	66.4	65.6	64.6	64.6	64.2	64.2	63.43
68.7	67.7	65.6	64.0	61.4	59.6	58.4	57.5	56.8	56.3	55.4	54.0	53.1	52.1	51.7	56.26
60.4	61.0	60.8	62.2	59.4	56.7	54.7	53.1	52.0	50.8	50.4	49.8	49.4	51.1	50.6	63.59
68.9	68.3	67.3	66.7	66.2	65.8	65.8	65.9	64.3	64.0	59.6	59.8	58.6	58.2	57.9	68.41
71.9	71.7	70.5	68.3	70.5	67.3	66.5	66.4	66.0	66.2	66.4	66.3	64.8	64.6	65.8	71.68
72.7	74.3	74.9	76.3	76.3	72.9	72.1	72.5	72.3	—	—	—	—	—	—	72.59
—	—	—	—	—	—	—	—	—	68.5	66.3	67.5	66.5	65.9	66.0	71.36
77.2	77.0	76.4	75.4	71.1	68.9	67.5	67.3	67.9	68.1	66.6	66.7	67.0	66.8	66.4	69.58
76.1	73.3	72.7	70.6	70.3	69.5	69.7	69.8	69.3	69.2	68.7	67.6	68.7	67.6	67.7	60.33
73.5	73.3	72.5	70.1	68.7	67.3	65.6	65.6	64.6	65.2	65.3	65.0	66.1	66.5	67.3	59.59
66.0	65.6	65.6	64.0	61.7	59.8	59.0	58.3	54.6	53.1	51.2	50.5	49.6	47.8	47.8	63.67
65.0	66.6	66.2	65.6	62.8	60.0	57.5	56.1	55.4	54.5	54.5	53.9	53.0	52.6	52.9	49.87
66.6	65.6	64.0	63.6	63.0	62.5	63.0	63.6	64.0	—	—	—	—	—	—	52.03
—	—	—	—	—	—	—	—	—	64.8	67.1	67.4	65.7	59.0	56.5	53.88
53.3	53.7	52.7	51.8	50.9	50.7	48.6	46.5	45.2	44.9	44.6	44.0	43.9	42.2	42.6	60.77
56.1	57.3	58.2	58.1	56.1	52.3	50.3	49.8	47.5	46.9	47.3	45.9	45.9	45.4	44.6	57.64
57.2	57.7	56.5	53.7	55.3	53.7	51.4	51.0	50.6	50.6	51.4	51.4	50.2	48.8	48.2	57.51
65.7	63.6	63.1	62.8	61.8	61.4	61.0	61.8	61.0	60.0	58.0	57.2	55.0	54.5	54.2	57.64
62.8	62.6	62.8	62.6	61.0	59.0	58.6	57.1	55.9	54.9	52.4	53.0	49.8	48.0	47.8	57.51
62.3	62.8	59.6	59.4	55.4	58.0	56.6	55.0	53.6	—	53.6	53.2	52.4	50.6	50.0	63.39
67.99	67.29	66.93	66.23	64.71	62.98	61.61	60.81	60.12	59.79	59.01	58.55	57.85	57.09	57.02	58.23
64.9	66.4	62.8	63.8	62.1	58.7	57.1	56.7	53.7	53.1	49.8	49.8	50.3	48.2	47.7	58.20
62.7	64.8	65.8	65.0	62.8	59.0	55.5	55.3	53.1	52.3	52.3	51.4	51.2	50.3	50.6	61.36
67.5	67.1	66.8	66.8	65.8	61.2	57.5	56.4	55.7	56.1	55.1	54.7	55.1	54.7	55.7	62.80
65.4	65.2	61.4	63.4	62.6	61.2	60.0	60.0	59.6	60.2	61.0	61.0	60.9	60.7	59.8	64.42
69.4	66.8	64.0	62.0	62.8	61.6	63.2	63.4	63.2	64.8	64.0	63.4	60.8	58.2	56.7	61.61
61.1	65.2	63.9	63.8	61.9	60.0	58.8	59.2	58.7	—	—	—	—	—	—	65.48
—	—	—	—	—	—	—	—	—	61.3	61.6	61.4	61.2	61.0	61.6	68.10
70.6	69.6	69.1	69.3	67.0	66.2	66.4	66.6	65.6	64.6	63.4	62.8	61.8	62.2	63.1	64.12
70.9	70.9	70.3	68.2	67.7	67.4	67.3	66.8	66.8	66.6	64.9	64.6	64.3	65.0	65.8	65.80
65.6	66.6	66.6	67.3	64.6	63.0	61.4	60.2	59.8	59.6	58.7	58.6	58.9	57.2	56.7	67.98
70.3	66.8	68.1	68.2	66.1	66.1	65.8	65.7	65.6	64.9	64.7	64.0	61.6	61.8	61.8	69.06
69.2	69.5	69.4	71.2	69.4	68.5	67.9	65.7	65.6	65.0	66.4	66.3	66.1	65.6	66.0	69.28
74.7	72.7	72.7	70.3	69.7	68.1	67.2	66.2	66.2	—	—	—	—	—	—	61.84
—	—	—	—	—	—	—	—	—	65.6	64.8	64.4	63.4	63.2	63.6	51.94
73.7	74.7	75.1	74.3	70.9	68.4	67.3	65.8	65.2	64.8	63.8	64.1	63.6	64.1	62.4	51.63
69.5	68.5	69.3	67.9	66.6	64.8	64.2	59.9	59.5	57.0	55.5	53.8	55.0	55.6	53.7	56.55
58.0	55.7	53.3	52.7	51.0	50.0	48.8	48.2	47.3	46.8	45.9	46.3	47.3	47.3	43.0	54.80
55.4	54.4	53.9	55.3	55.1	52.5	49.7	51.1	50.9	51.8	50.6	50.0	48.6	49.2	50.0	56.36
59.8	62.6	57.8	58.2	56.7	55.9	55.3	55.1	53.7	54.0	52.7	52.5	51.4	50.2	49.4	57.64
60.2	59.2	61.2	60.0	59.0	55.2	54.1	53.5	52.4	—	—	—	—	—	—	63.00
—	—	—	—	—	—	—	—	—	49.8	49.8	49.0	49.0	48.8	48.8	54.66
64.8	63.3	63.1	61.6	58.4	55.5	54.7	53.3	52.1	50.9	51.0	50.9	50.7	48.7	48.5	57.50
61.4	61.5	62.0	62.1	58.0	55.1	53.9	52.6	52.8	52.5	52.1	51.3	51.3	49.8	50.1	59.74
62.2	61.0	60.8	59.7	57.8	55.7	55.3	55.0	54.9	54.4	52.9	52.3	52.1	52.2	50.6	51.30
69.0	68.1	65.8	64.8	62.8	62.0	62.1	62.0	63.4	62.3	61.8	62.6	60.0	58.6	54.5	—
59.1	59.3	60.2	60.6	55.7	56.9	55.1	53.5	52.3	51.6	50.8	48.4	46.4	47.0	47.7	—
60.0	61.2	62.3	60.6	57.4	56.5	55.4	55.5	54.1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	58.1	56.7	55.2	54.6	54.9	54.9	—
61.6	62.8	63.0	62.6	61.2	59.0	58.6	57.8	56.0	54.2	53.6	52.7	49.2	48.6	47.8	—
56.7	56.8	55.7	55.5	52.4	50.0	48.2	47.3	47.5	46.9	45.9	44.7	47.1	47.3	48.8	—
64.99	64.64	64.13	63.66	61.75	60.02	58.89	58.11	57.53	57.25	56.53	56.01	55.46	55.02	54.59	58.63

WET THERMOMETER.												
Hour of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	1	49°8	50°8	51°4	52°9	53°4	53°5	53°8	60°2	59°5	59°2	59°6
	2	48°9	51°1	50°0	61°7	63°5	61°0	63°6	63°4	65°4	66°0	65°4
	3	56°8	61°9	63°1	63°1	67°1	69°1	69°1	66°9	69°5	68°5	66°9
	4	53°7	53°7	53°5	51°2	54°7	55°2	55°2	55°7	55°7	56°3	56°3
	5	—	—	—	—	—	—	—	—	—	—	—
	6	48°2	50°3	53°5	59°0	60°2	60°8	60°6	61°4	61°3	62°4	60°5
	7	52°1	58°0	60°6	60°0	59°7	59°8	59°8	60°8	59°8	59°9	59°8
	8	63°0	64°0	65°6	66°6	69°0	69°6	69°9	68°9	69°6	68°8	68°2
	9	49°3	49°1	49°7	49°3	50°8	50°6	51°4	55°3	55°5	55°5	55°5
	10	44°0	49°0	51°7	56°2	56°5	56°5	57°9	56°3	57°5	57°5	58°1
	11	46°5	50°8	54°5	58°5	58°0	58°6	57°2	57°4	56°5	51°4	51°0
	12	—	—	—	—	—	—	—	—	—	—	—
	13	52°7	51°4	50°6	50°9	50°8	50°1	50°5	50°6	48°8	47°8	46°5
	14	43°4	43°8	44°2	44°9	45°8	45°3	45°8	45°9	47°2	47°2	48°4
	15	37°2	41°3	43°4	45°3	46°6	47°8	48°5	49°3	52°0	52°2	52°4
	16	37°8	42°8	48°5	49°8	53°1	53°7	54°3	54°5	55°3	55°2	55°3
	17	49°4	49°8	53°9	56°3	58°3	58°4	58°0	57°7	56°5	56°8	55°9
	18	55°9	57°1	58°3	58°6	59°6	59°4	60°0	60°1	59°4	59°4	58°1
	19	—	—	—	—	—	—	—	—	—	—	—
	20	55°5	54°0	54°7	54°7	54°9	55°1	55°3	55°5	55°1	55°1	54°4
	21	50°5	52°6	51°0	55°1	55°5	56°3	57°3	56°2	56°3	51°9	53°7
	22	47°2	47°5	50°6	51°6	56°3	56°3	56°0	54°9	54°5	53°9	55°5
	23	49°6	52°3	56°9	59°0	59°7	61°6	61°5	62°2	62°8	61°8	62°2
	24	52°7	52°6	52°5	52°5	52°7	53°7	53°7	53°9	53°7	53°9	51°0
	25	47°1	47°5	48°5	50°7	52°6	53°9	56°0	55°2	54°6	54°1	53°7
	26	—	—	—	—	—	—	—	—	—	—	—
	27	37°3	38°4	59°2	60°0	61°7	63°2	64°7	65°3	64°8	64°9	65°2
	28	—	48°1	50°7	50°6	51°4	52°4	52°5	49°2	48°8	48°2	47°1
	29	—	42°9	45°3	47°5	50°6	46°1	49°3	50°8	45°2	45°5	46°9
	30	—	40°5	43°0	46°1	48°2	48°0	50°0	49°0	47°1	47°4	48°4
Hourly Means	48°86	50°93	53°07	54°54	56°00	56°30	56°84	56°79	56°63	56°42	56°29	55°85
OCTOBER.	1	43°3	44°4	45°6	45°3	45°4	46°8	47°1	47°3	46°9	46°9	46°6
	2	38°2	40°6	44°8	46°5	48°2	48°3	47°7	48°2	51°0	51°5	49°9
	3	—	—	—	—	—	—	—	—	—	—	—
	4	40°3	43°7	50°9	55°2	56°0	56°0	57°1	56°1	55°7	54°3	55°1
	5	56°6	57°6	58°1	59°3	58°6	59°5	61°6	61°3	61°3	61°9	60°0
	6	55°8	55°9	56°0	56°1	55°8	55°8	56°1	55°8	55°7	55°7	55°8
	7	51°2	53°9	53°9	53°7	51°2	53°7	54°0	54°1	54°7	54°7	55°2
	8	54°9	54°7	54°9	55°2	56°2	56°7	57°1	55°9	55°7	55°7	56°0
	9	39°5	43°0	45°3	45°8	49°6	49°1	49°1	51°6	53°4	52°8	53°3
	10	—	—	—	—	—	—	—	—	—	—	—
	11	36°3	36°8	37°8	38°6	39°4	40°2	40°6	41°0	42°1	42°8	42°4
	12	39°3	40°6	42°1	43°5	44°7	44°7	43°4	42°9	42°6	42°5	42°7
	13	36°9	37°5	38°9	38°6	39°5	39°9	39°9	39°5	39°5	38°8	38°6
	14	34°7	33°9	33°9	35°7	36°7	36°1	36°1	35°2	36°0	35°6	34°3
	15	28°7	29°2	31°6	33°3	34°3	38°5	38°4	38°6	39°3	39°1	37°8
	16	41°4	42°2	43°9	44°8	46°0	46°7	47°5	49°6	50°3	50°5	49°9
	17	—	—	—	—	—	—	—	—	—	—	—
	18	38°8	40°1	44°6	48°2	52°0	53°8	56°7	57°5	57°3	56°9	56°1
	19	41°0	43°7	43°5	46°1	44°7	44°9	45°1	44°5	45°4	45°4	45°7
	20	29°9	30°9	36°0	41°3	44°4	45°5	45°0	45°8	44°7	44°4	43°1
	21	32°8	33°6	36°0	38°6	39°7	41°3	41°1	40°4	40°3	40°4	40°2
	22	37°2	37°3	37°2	37°0	37°5	37°6	37°2	37°8	38°4	39°2	38°7
	23	35°0	31°4	36°8	40°8	42°6	43°6	46°5	46°4	45°8	46°3	46°0
	24	—	—	—	—	—	—	—	—	—	—	—
	25	45°4	45°2	45°6	46°4	44°1	43°0	42°7	42°1	40°0	37°4	34°1
	26	27°4	30°5	31°9	28°8	28°9	28°6	29°2	28°5	27°8	27°5	25°9
	27	17°6	17°2	19°0	25°6	27°0	28°0	30°3	31°5	31°8	32°8	30°5
	28	24°5	25°5	30°0	31°6	33°1	36°6	35°8	36°4	37°1	36°9	35°9
	29	27°0	31°9	32°6	39°0	42°2	43°9	44°6	44°8	45°0	44°7	44°9
	30	33°5	33°3	36°0	42°7	45°6	46°9	46°7	47°5	47°5	47°1	46°9
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	38°01	39°02	41°04	43°07	44°09	44°87	45°27	45°41	45°59	45°45	44°82	43°79

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
59.2	59.6	60.2	60.1	59.4	54.1	53.4	52.9	52.7	51.9	50.8	50.3	50.6	50.3	49.0	54.99
66.0	66.5	67.4	64.0	62.0	63.0	63.2	60.8	59.0	58.0	55.9	55.4	53.7	55.0	54.8	60.26
68.5	66.9	61.2	58.8	56.5	55.7	53.8	55.5	54.5	53.9	53.5	54.1	54.1	54.1	54.1	60.16
56.3	56.3	56.8	57.1	57.4	58.1	58.7	58.8	59.0	—	—	—	—	—	—	53.92
62.4	60.5	60.3	59.3	58.0	56.3	56.3	56.0	54.3	54.3	47.5	47.3	46.9	46.9	46.9	56.28
59.9	59.8	60.0	58.8	59.2	58.6	60.8	61.4	61.0	61.2	61.6	61.4	61.6	61.6	62.1	59.99
68.8	68.7	60.2	66.9	66.0	65.5	65.6	57.4	53.7	53.5	52.5	52.7	52.5	49.6	48.0	62.37
55.5	55.5	55.1	54.7	53.5	53.7	50.6	49.2	47.3	45.2	43.9	43.9	43.3	43.0	43.0	49.93
57.5	58.1	58.0	56.5	52.4	50.6	49.6	48.7	48.0	47.8	47.7	47.1	46.2	45.7	45.9	51.89
51.1	51.0	51.1	51.2	50.4	49.2	49.2	49.0	48.8	—	—	—	—	—	—	53.57
47.8	46.5	45.9	45.1	44.4	43.4	42.8	42.4	42.4	54.5	51.2	53.7	53.7	53.9	54.3	46.44
47.2	48.4	45.7	45.1	42.4	41.7	41.1	41.5	40.9	40.3	39.0	38.4	37.4	38.0	37.5	42.93
52.2	52.4	52.0	52.3	48.2	46.7	45.2	45.7	45.1	44.2	42.2	40.1	39.1	38.3	38.0	45.63
53.2	55.3	54.0	52.3	49.5	48.2	47.0	47.6	48.2	48.6	48.5	48.5	48.0	48.8	49.4	49.95
56.8	55.9	55.0	54.2	51.1	51.0	54.7	53.3	53.3	53.1	58.1	57.1	56.7	56.4	56.3	55.30
59.4	58.1	57.3	56.6	58.2	58.2	57.5	57.4	57.7	—	—	—	—	—	—	57.09
55.1	54.4	53.7	54.5	51.8	51.9	51.6	51.2	50.6	50.6	51.8	51.8	51.0	52.5	51.5	53.28
51.9	53.7	53.1	52.6	48.8	47.5	47.1	46.7	46.7	45.7	43.8	43.0	43.9	44.0	43.8	50.30
53.9	55.5	55.3	52.3	50.9	49.4	48.6	50.1	48.1	47.2	45.7	45.3	44.9	45.1	45.3	50.40
61.8	62.2	62.3	60.0	58.9	58.8	57.8	56.4	55.7	57.4	55.5	55.6	54.2	53.4	52.7	57.82
54.9	54.0	54.1	53.9	53.7	53.7	53.4	53.2	52.3	52.1	52.0	51.3	49.2	47.7	47.1	52.45
51.1	51.7	51.9	52.5	53.3	53.3	52.7	52.5	51.3	—	—	—	—	—	—	53.64
64.9	65.2	64.0	62.6	60.9	60.6	56.5	54.8	51.9	49.1	47.8	47.1	45.8	45.7	45.3	57.37
48.2	47.1	47.6	46.6	46.2	44.7	43.6	43.8	42.5	41.4	41.1	41.0	42.0	42.2	42.5	46.25
45.5	46.9	47.0	45.7	45.2	44.9	43.4	43.0	43.6	43.6	42.0	39.9	40.3	37.8	38.4	44.48
47.4	48.1	48.1	47.8	44.3	43.7	42.8	44.0	44.9	43.9	47.3	47.1	46.9	46.9	44.3	45.89
56.42	56.29	57.8	54.75	53.48	52.52	51.92	51.28	50.52	50.03	49.56	49.13	48.76	48.55	48.27	52.79
46.9	46.6	46.2	44.6	44.8	44.1	38.4	39.5	39.3	38.5	37.0	57.6	38.8	38.2	38.1	42.71
51.5	49.9	49.1	45.8	44.4	43.6	45.1	45.3	43.0	—	—	—	—	—	—	45.59
54.3	55.1	54.1	51.5	51.6	54.7	54.3	54.2	53.1	53.6	53.5	52.8	53.5	53.6	55.4	53.43
61.9	60.0	58.8	57.9	57.7	57.7	57.6	56.8	56.6	56.6	56.6	56.1	56.4	56.2	55.7	58.20
53.7	55.8	56.2	56.4	54.3	56.4	56.1	56.2	55.6	55.6	54.9	54.9	54.7	54.5	54.6	55.69
54.7	55.2	55.9	54.4	55.7	55.9	55.2	55.0	54.5	54.4	54.8	54.5	54.3	53.7	55.1	54.58
53.7	56.0	55.1	53.0	53.9	51.2	48.4	47.1	46.8	46.0	45.3	44.0	43.1	41.6	41.3	51.28
52.8	54.3	54.1	51.5	51.0	51.3	51.8	50.5	49.9	—	—	—	—	—	—	46.97
42.8	42.1	42.1	41.6	39.5	40.4	39.3	38.6	37.1	36.9	36.7	37.6	37.6	39.1	39.5	39.33
42.5	42.7	43.0	42.1	42.9	42.2	42.1	41.9	42.1	41.1	39.5	38.8	38.0	37.5	37.3	41.62
38.8	38.8	36.6	41.3	35.3	33.9	32.9	32.1	31.3	30.9	32.3	32.9	33.4	34.2	34.3	35.97
35.6	34.3	32.3	34.9	30.4	29.4	28.8	28.2	28.0	26.4	25.9	26.0	27.5	27.7	28.2	31.54
39.1	37.8	37.7	36.6	39.0	38.8	38.5	40.0	41.0	41.0	40.9	40.8	41.0	41.0	40.5	37.72
50.5	49.9	49.1	49.5	50.4	50.3	49.7	49.7	49.9	—	—	—	—	—	—	45.40
56.9	56.1	55.4	56.7	54.5	53.9	52.9	50.9	50.3	49.5	48.2	47.2	44.9	42.1	41.3	50.42
45.4	43.7	42.7	42.1	39.5	39.2	37.4	36.1	33.1	32.2	31.1	29.7	30.0	29.6	29.6	39.07
44.4	43.1	40.1	38.2	36.7	37.3	37.0	36.0	34.9	34.3	29.5	28.9	29.8	29.6	32.4	37.11
40.4	40.4	40.2	40.3	40.1	39.7	39.3	39.4	38.1	37.9	37.8	37.4	37.4	37.2	37.4	38.62
39.2	39.4	38.7	38.9	38.6	38.6	38.4	38.0	38.1	38.2	35.2	34.4	33.4	33.9	35.8	37.33
46.3	46.0	44.3	43.5	39.8	39.4	38.1	37.2	37.1	—	—	—	—	—	—	42.45
37.4	34.4	32.4	31.9	31.4	31.3	30.5	30.5	29.7	28.9	28.6	28.1	27.8	27.6	26.5	35.49
27.5	25.9	24.7	24.4	20.8	20.0	19.4	18.8	18.0	17.5	16.5	16.8	16.8	17.0	16.8	23.31
32.8	30.5	30.4	29.6	31.9	30.6	29.0	29.0	26.8	26.5	26.0	25.9	25.9	25.9	25.5	27.26
36.9	35.9	34.5	33.8	33.6	32.7	29.4	28.1	28.0	28.0	27.5	26.9	27.3	26.7	26.8	31.11
44.7	44.9	42.1	41.3	39.7	39.4	36.7	35.4	34.1	33.6	33.1	32.3	32.1	32.4	32.9	37.75
47.1	46.9	44.2	41.8	42.7	39.3	37.5	35.5	35.1	—	—	—	—	—	—	43.05
45.45	44.82	43.79	42.95	42.39	41.86	40.93	40.34	39.63	39.35	38.75	38.37	38.34	38.13	38.26	41.65

WET THERMOMETER.												
Hours of Mean Gaiting Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
NOVEMBER.	1	47.7	48.3	49.1	50.1	51.6	52.6	54.1	55.9	53.3	52.1	50.8
	2	49.4	49.4	50.5	51.6	52.6	53.9	54.1	55.9	53.7	53.4	52.9
	3	45.6	45.8	52.1	52.9	52.3	51.9	53.6	53.5	54.0	53.3	53.3
	4	41.6	41.2	44.5	44.2	45.6	48.5	48.0	47.8	47.3	45.8	45.5
	5	34.6	34.5	36.4	37.9	39.5	40.1	40.0	40.4	40.0	39.2	38.6
	6	30.8	29.0	31.7	33.7	34.7	35.3	35.3	35.0	35.2	35.8	36.1
	7	—	—	—	—	—	—	—	—	—	—	—
	8	45.0	45.5	46.0	45.7	46.0	46.4	46.7	48.1	47.9	48.1	48.3
	9	50.6	50.6	52.7	53.3	54.7	51.5	49.1	47.5	47.2	47.1	45.8
	10	34.8	35.0	35.4	36.3	36.9	35.7	36.0	35.8	35.6	35.5	35.6
	11	33.2	33.6	33.6	34.0	34.5	34.8	34.8	34.8	34.8	34.4	34.4
	12	30.8	29.5	31.0	34.6	35.9	36.0	36.2	36.2	35.5	36.2	35.6
	13	33.4	33.0	33.7	35.4	36.0	36.4	37.2	37.9	38.5	37.5	37.2
	14	—	—	—	—	—	—	—	—	—	—	—
	15	37.1	37.2	37.4	38.1	38.7	38.9	38.7	37.9	37.2	36.9	36.7
	16	28.0	27.4	30.4	35.6	37.7	39.3	42.0	43.1	44.6	45.2	44.0
	17	43.2	43.1	43.6	44.5	46.1	47.3	47.4	47.9	47.6	48.1	47.6
	18	42.2	42.0	42.0	42.2	42.7	42.8	42.9	42.8	43.2	44.0	45.4
	19	31.6	31.4	29.4	28.4	27.9	26.9	27.2	26.6	26.9	26.1	25.8
	20	19.2	19.2	20.4	23.0	25.8	26.9	27.4	28.1	28.6	28.4	28.0
	21	—	—	—	—	—	—	—	—	—	—	—
	22	35.8	36.2	36.2	38.2	40.2	42.7	43.7	44.3	43.3	42.9	41.5
	23	41.8	42.1	42.7	44.1	45.7	47.7	49.5	50.5	50.2	50.7	50.6
	24	48.0	45.7	46.0	46.4	48.3	49.6	48.4	48.7	48.8	47.8	47.7
	25	40.0	40.0	39.6	41.4	41.1	41.1	39.9	39.4	38.8	38.4	38.2
	26	26.0	25.4	25.2	25.1	25.1	25.2	25.8	25.8	25.6	25.6	25.7
	27	23.8	24.6	25.6	26.3	26.5	26.9	26.9	29.2	30.5	30.5	29.4
	28	—	—	—	—	—	—	—	—	—	—	—
	29	10.0	9.8	10.3	10.4	11.4	13.4	13.4	13.8	15.2	15.6	15.6
	30	18.4	18.2	20.6	22.2	23.1	23.7	24.2	24.6	25.3	24.7	23.2
Hourly Means		35.48	35.30	36.39	37.52	38.48	39.05	39.30	39.60	39.56	39.39	38.96
DECEMBER.	1	31.9	33.2	33.4	33.6	34.2	35.4	36.5	36.3	37.5	37.3	36.4
	2	35.1	34.6	34.5	35.5	36.2	36.7	37.5	37.4	36.2	36.7	36.2
	3	33.0	33.0	33.0	33.0	33.0	33.2	32.9	32.9	31.7	30.5	30.3
	4	26.0	25.7	25.7	27.2	27.4	29.4	30.3	30.3	30.0	30.2	29.8
	5	—	—	—	—	—	—	—	—	—	—	—
	6	26.3	26.7	27.0	28.6	30.5	29.6	31.3	31.7	33.2	32.4	32.4
	7	31.7	31.7	31.2	33.2	34.7	36.0	36.5	36.7	37.3	37.2	37.1
	8	35.1	34.7	35.8	37.2	39.6	41.3	42.2	42.8	42.3	42.8	42.6
	9	36.0	36.0	35.6	36.0	36.5	37.5	38.3	38.8	39.7	41.9	42.5
	10	47.2	46.1	46.2	46.3	47.3	46.9	46.9	46.7	46.9	43.7	42.5
	11	33.8	34.2	34.7	35.2	35.8	35.7	35.6	34.1	34.5	34.4	34.1
	12	—	—	—	—	—	—	—	—	—	—	—
	13	36.8	36.7	35.8	35.9	35.9	36.0	36.3	36.0	35.2	34.1	34.0
	14	31.5	31.6	31.9	32.5	32.8	33.0	33.0	33.0	32.9	33.0	32.9
	15	32.8	29.4	27.8	28.6	28.1	29.4	30.9	29.2	29.3	29.5	28.2
	16	12.9	12.9	13.3	13.3	14.6	15.3	16.5	17.2	18.2	18.6	19.6
	17	16.0	16.6	17.1	17.7	18.2	19.8	22.1	24.6	25.8	26.2	26.4
	18	14.0	14.3	15.4	19.0	22.5	24.8	26.9	29.4	30.3	30.3	31.1
	19	—	—	—	—	—	—	—	—	—	—	—
	20	13.3	13.3	12.7	12.4	13.1	13.4	13.8	14.4	14.8	14.1	13.1
	21	11.1	10.2	9.8	10.4	13.2	16.4	17.1	17.7	18.2	19.4	20.5
	22	20.8	20.6	20.6	21.4	22.4	23.5	23.2	23.3	23.5	23.7	23.8
	23	17.7	17.8	19.6	19.4	19.6	21.8	23.1	23.5	24.1	24.3	23.6
	24	20.4	20.0	19.9	21.4	21.6	20.0	19.9	20.4	20.3	20.3	20.1
	25 ^a	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	12.9	12.2	11.3	12.2	15.3	15.8	18.3	17.7	18.6	19.2	18.9
	28	29.6	30.5	30.8	32.3	32.8	32.9	33.3	33.4	33.6	34.1	34.1
	29	36.9	37.6	37.5	38.6	40.2	40.2	41.2	40.8	40.6	40.5	40.8
	30	40.6	39.8	40.0	42.0	42.5	43.3	44.7	45.0	44.7	43.7	43.1
	31	42.6	42.1	42.3	42.7	44.3	45.4	44.6	44.7	44.9	44.3	44.3
Hourly Means		27.92	27.75	27.80	28.68	29.70	30.49	31.19	31.46	31.70	31.63	31.50

^a Christmas Day.

9	10	11
3	4	5
52°1	50°8	49°3
53°4	52°9	50°7
53°3	53°3	52°6
45°8	45°5	45°3
39°2	38°6	37°5
35°8	36°1	35°3
48°1	48°3	48°2
47°1	45°8	43°2
35°5	35°6	34°8
34°4	34°4	34°1
36°2	35°6	34°8
37°5	37°2	36°9
36°9	36°7	37°0
45°2	44°0	43°2
48°1	47°6	47°4
44°0	45°4	46°0
26°9	26°1	25°8
28°4	28°0	27°2
42°9	41°5	40°2
50°7	50°6	51°2
47°8	47°7	47°1
38°4	38°2	36°9
25°6	24°8	23°7
30°5	29°4	29°1
15°6	15°6	14°9
24°7	24°2	23°5
39°39	38°46	38°1

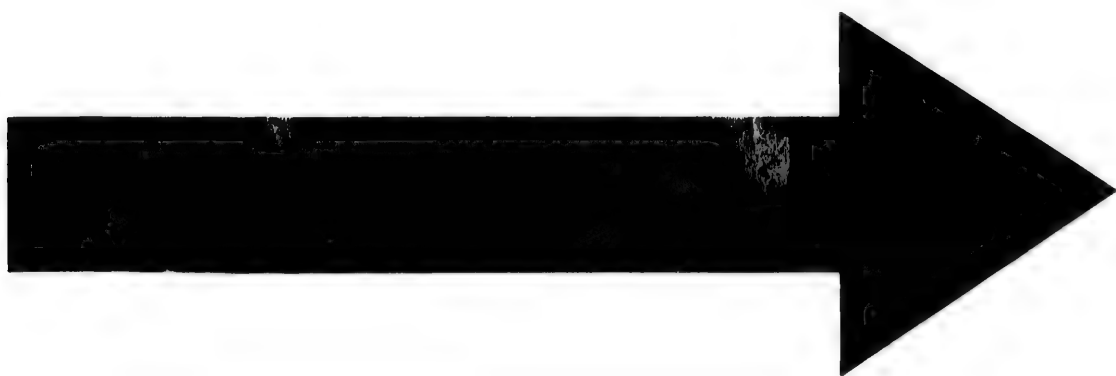
32°14'	32°14'	30°4
37°52'	37°11'	31°56
42°38'	42°16'	32°4
41°59'	42°5'	33°3
43°7'	42°5'	34°1
31°14'	34°1'	32°1
---	---	---
34°1'	34°0'	33°6
33°0'	33°0'	32°4
29°5'	28°2'	27°4
18°6'	19°6'	20°0
26°2'	26°4'	25°3
30°3'	31°4'	32°0
---	---	---
14°1'	13°4'	11°1
19°4'	20°5'	20°8
23°7'	23°8'	22°5
24°3'	23°6'	23°3
20°3'	20°1'	19°8
---	---	---
19°2'	18°9'	19°6
34°1'	34°4'	34°6
40°5'	40°8'	40°6
43°7'	43°7'	43°1
44°3'	44°3'	44°0
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31°6'3	31°5'0	30°5'2

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
46.9	47.8	49.0	49.9	48.8	49.2	49.2	50.4	49.1	49.0	49.4	49.5	50.05	
49.6	48.8	49.8	51.8	50.8	49.9	49.4	49.2	49.3	48.9	47.2	46.8	50.82	
53.4	51.8	51.9	52.5	52.3	48.3	47.6	47.6	45.0	44.2	42.5	41.2	49.97	
40.9	39.5	39.4	36.2	37.6	36.3	35.7	35.5	34.4	33.6	34.0	35.1	40.89	
35.7	34.6	33.6	33.6	33.8	34.2	33.8	33.3	33.0	32.3	31.9	31.4	35.82	
32.5	30.2	29.1	29.4	29.4	29.1	—	—	—	—	—	—	—	
48.2	48.1	48.2	47.7	47.6	47.8	48.8	48.8	48.8	50.3	50.3	51.3	47.83	
41.7	39.6	38.6	38.8	37.6	37.2	37.4	34.8	33.9	34.5	34.8	35.0	43.22	
34.4	34.4	34.2	33.6	34.0	34.1	33.6	33.6	33.6	33.4	33.2	33.1	34.69	
33.7	33.2	33.2	33.4	33.4	33.4	33.4	32.8	33.0	32.6	31.2	31.8	33.59	
34.6	34.2	34.2	34.0	34.1	34.0	34.0	34.2	34.5	34.9	35.0	35.0	34.37	
37.9	38.3	38.5	38.7	39.1	38.4	—	—	—	—	—	—	—	
36.7	36.5	35.8	34.7	33.0	32.1	32.3	32.1	31.5	29.4	29.4	29.0	35.18	
42.8	43.7	43.7	42.7	42.7	45.0	43.9	41.0	43.9	44.3	43.6	42.9	40.99	
46.1	45.7	45.5	45.6	45.2	44.9	44.3	44.3	43.9	43.7	43.7	42.8	45.40	
45.6	45.7	45.7	48.9	46.2	44.5	43.7	40.9	39.6	38.4	35.0	31.2	42.78	
25.5	25.4	24.9	24.7	24.6	23.4	22.7	22.1	21.9	21.0	20.7	19.4	25.47	
28.2	30.2	31.0	31.1	30.7	29.8	—	—	—	—	—	—	—	
39.8	40.1	39.9	40.4	40.5	40.8	42.3	41.4	41.6	41.8	41.8	41.4	40.71	
50.6	50.8	50.3	50.3	50.7	50.3	49.8	49.3	48.7	50.1	49.5	49.5	48.61	
45.2	43.5	43.1	42.3	41.8	41.4	41.4	41.2	40.9	40.7	40.5	40.6	41.79	
37.0	36.5	35.8	35.8	34.8	34.6	33.2	32.8	30.9	30.5	30.3	27.2	36.07	
23.2	22.6	22.8	21.8	21.6	20.9	20.2	20.9	21.8	22.1	22.1	24.2	23.62	
29.1	29.6	29.4	30.2	29.7	29.3	—	—	—	—	—	—	—	
13.0	12.3	12.3	12.8	13.5	14.9	10.9	10.4	9.8	9.4	8.8	8.6	23.52	
22.5	23.7	24.6	26.2	28.2	29.4	15.6	17.9	17.4	16.5	18.1	18.1	13.97	
—	—	—	—	—	—	28.5	28.6	26.1	24.1	24.5	24.5	24.23	
37.49	37.18	37.10	37.20	36.98	36.61	36.33	36.05	35.66	35.44	35.02	34.97	37.22	
34.8	34.0	34.0	33.8	34.6	35.8	36.7	36.8	36.0	35.8	35.6	35.2	35.18	
35.1	35.1	35.1	34.6	34.2	33.2	32.8	33.1	32.9	33.1	33.2	33.0	34.86	
29.1	28.5	28.3	27.9	27.8	27.6	26.9	26.8	27.0	26.7	26.2	26.1	29.79	
30.2	31.2	32.0	33.2	33.2	33.2	33.0	—	—	—	—	—	—	
27.6	29.6	28.4	28.4	31.1	31.1	30.8	30.7	31.1	31.7	31.9	31.7	30.18	
32.7	31.9	31.5	31.9	32.9	31.7	32.8	32.4	32.8	32.6	34.4	34.3	33.74	
41.9	41.1	41.1	41.2	41.0	42.0	42.0	39.9	38.2	37.9	37.2	36.2	39.94	
43.4	44.1	44.1	45.0	44.5	47.4	46.6	47.0	45.2	44.8	46.2	46.6	41.96	
39.7	38.7	38.3	38.1	37.5	36.7	36.5	36.2	35.7	34.3	33.6	33.8	41.12	
29.1	27.5	26.9	27.4	26.9	28.4	—	—	—	—	—	—	—	
33.2	33.0	31.9	31.9	31.0	30.9	30.6	30.7	30.7	30.9	31.0	31.3	33.48	
32.8	32.7	32.8	32.8	32.6	32.8	32.8	32.9	32.8	32.9	32.1	33.2	32.68	
26.7	26.0	24.1	21.2	20.5	19.1	18.1	17.1	15.8	13.5	12.6	12.5	24.07	
20.2	20.8	19.8	19.6	19.6	19.1	18.4	17.9	15.8	15.1	14.8	15.8	17.05	
25.1	22.5	22.5	21.8	20.2	18.4	18.1	16.9	15.4	14.8	13.2	15.0	19.99	
32.8	32.6	33.0	32.0	30.7	32.4	—	—	—	—	—	—	—	
10.7	9.9	9.4	10.7	11.0	11.1	11.1	10.8	10.2	10.3	10.0	9.2	11.83	
20.6	22.7	22.9	23.7	23.7	24.0	24.1	24.8	24.2	22.5	21.3	21.0	19.18	
20.4	18.4	17.7	17.3	17.9	18.4	17.0	16.6	16.8	16.8	17.1	17.1	20.03	
23.3	23.3	23.5	23.7	23.6	23.5	22.7	22.6	22.6	22.8	22.7	21.4	22.23	
19.8	19.6	19.1	18.8	18.6	18.5	—	—	—	—	—	—	—	
—	—	—	—	—	—	10.7	10.7	11.3	12.3	13.8	13.3	17.94	
19.6	19.2	19.0	22.1	23.0	24.8	25.1	25.8	25.8	27.0	28.0	28.6	20.01	
34.6	35.0	35.0	35.0	35.0	35.2	35.8	35.8	36.3	36.1	36.3	36.8	34.12	
40.2	39.6	39.1	38.5	38.4	38.3	39.4	39.8	40.0	40.6	40.9	40.9	39.63	
42.7	43.1	43.1	42.1	42.2	41.5	41.7	41.7	41.7	41.3	40.7	42.2	42.39	
43.4	42.7	42.4	42.3	43.5	43.1	41.3	44.9	45.3	46.0	46.0	46.2	44.03	
30.37	30.11	29.81	29.81	29.83	29.95	29.24	29.07	28.73	28.56	28.44	28.53	29.75	

WET THERMOMETER.												
Units of Mean Temperature Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.	1	16°2	47°2	46°6	47°1	46°6	47°9	48°3	48°2	49°2	48°3	50°4
	2	—	—	—	—	—	—	—	—	—	—	—
	3	32°6	32°5	32°9	34°0	34°5	35°2	35°5	36°0	36°2	36°5	35°4
	4	33°7	34°1	32°1	28°0	28°6	28°1	26°0	25°1	25°5	25°1	24°0
	5	24°2	25°6	26°5	27°4	27°8	29°3	31°7	33°4	33°6	35°6	33°6
	6	12°0	11°2	10°4	10°7	10°7	12°1	12°9	13°9	13°5	11°0	14°0
	7	13°5	14°8	14°6	15°5	15°8	17°0	18°8	19°6	19°8	19°9	19°7
	8	30°4	31°0	30°8	30°7	31°0	31°6	31°8	33°1	33°0	30°7	30°3
	9	—	—	—	—	—	—	—	—	—	—	—
	10	10°5	11°2	10°9	8°8	6°2	2°5	2°2	1°8	0°8	0°9	0°6
	11	9°6	9°6	14°9	16°6	17°4	19°4	19°6	21°0	21°8	22°3	21°6
	12	11°7	8°9	8°2	14°4	19°1	21°4	24°0	25°9	25°5	26°0	23°7
	13	31°5	32°1	32°8	33°1	33°6	34°2	35°4	35°7	35°8	36°3	36°2
	14	36°7	36°8	37°3	37°5	37°5	37°9	38°3	38°3	38°4	38°4	38°4
	15	40°0	39°8	41°1	41°1	42°8	43°7	44°7	44°5	44°9	47°4	45°4
	16	—	—	—	—	—	—	—	—	—	—	—
	17	29°5	29°3	24°6	24°0	22°7	21°6	22°0	23°5	22°9	23°7	23°7
	18	27°0	25°3	19°7	22°0	20°6	19°6	20°0	19°2	18°9	18°3	17°0
	19	5°6	5°6	6°5	9°6	13°5	14°3	16°9	17°5	19°3	20°3	20°9
	20	27°5	28°0	28°2	30°7	33°2	33°5	34°2	35°9	36°7	38°2	36°7
	21	35°9	35°8	35°8	37°2	39°6	39°8	38°5	37°3	35°4	33°8	29°7
	22	15°1	15°4	16°5	17°6	19°2	21°7	23°5	24°6	25°6	27°4	26°8
	23	—	—	—	—	—	—	—	—	—	—	—
	24	21°9	20°9	21°3	26°0	27°6	28°6	29°4	29°2	30°7	30°7	30°8
	25	27°4	27°8	29°4	32°7	33°2	35°7	36°2	36°6	37°7	38°0	36°7
	26	37°5	37°4	37°5	38°0	38°0	37°9	38°3	38°7	39°4	39°7	40°0
	27	38°0	37°5	38°1	39°0	40°1	41°2	42°1	41°4	40°1	40°2	39°2
	28	29°0	29°6	29°6	29°6	31°3	32°6	33°0	33°4	33°4	33°2	33°2
	29	26°1	26°1	28°6	30°7	29°0	28°6	28°7	29°0	29°4	29°3	30°3
	30	—	—	—	—	—	—	—	—	—	—	—
	31	33°2	33°6	34°4	35°8	36°0	36°5	37°0	37°5	37°7	38°8	35°4
Hourly Means	25°59	25°68	25°67	26°62	27°82	28°73	29°39	29°87	30°20	30°19	29°76	28°
FEBRUARY.	1	24°1	24°6	25°1	25°	26°4	26°6	26°4	25°6	26°0	26°0	26°0
	2	21°1	21°	21°8	27°1	31°9	33°2	33°0	33°0	33°2	33°4	33°2
	3	29°0	27°6	27°7	33°1	33°0	34°4	37°1	37°5	37°7	37°5	36°5
	4	32°3	32°8	33°	35°4	37°5	37°8	37°6	37°8	37°0	37°3	37°4
	5	27°2	26°8	26°1	26°0	26°1	26°9	26°9	25°8	26°5	26°4	25°7
	6	—	—	—	—	—	—	—	—	—	—	—
	7	21°6	20°8	20°4	20°3	21°1	21°8	22°5	23°4	24°6	25°6	25°8
	8	18°9	19°4	19°8	21°2	22°5	22°9	24°6	25°8	26°4	26°2	25°7
	9	22°3	22°3	24°8	27°2	26°9	28°4	30°5	30°9	30°9	30°9	30°5
	10	20°1	18°1	16°4	13°1	13°5	14°0	14°6	15°5	15°4	16°0	15°3
	11	1°0	0°4	0°9	3°2	5°0	7°5	10°3	10°3	11°0	12°1	12°6
	12	12°8	13°3	14°3	15°3	18°0	19°5	19°7	21°8	22°9	23°1	22°9
	13	—	—	—	—	—	—	—	—	—	—	—
	14	19°6	18°7	20°4	25°8	28°4	31°1	32°8	33°8	34°4	34°6	34°6
	15	19°4	18°0	18°1	19°6	22°7	25°2	25°8	30°5	28°7	28°0	29°4
	16	20°2	23°3	24°8	30°4	31°3	32°6	33°1	33°1	32°8	33°1	32°9
	17	21°6	21°0	24°8	28°5	32°4	33°1	34°0	34°1	34°5	34°0	33°5
	18	20°4	20°5	24°8	28°1	31°9	32°9	33°0	33°0	34°6	34°2	35°1
	19	30°8	31°6	32°7	33°1	34°2	35°6	36°9	37°1	36°7	36°0	34°9
	20	—	—	—	—	—	—	—	—	—	—	—
	21	34°4	34°2	34°2	35°4	35°9	36°5	38°1	38°7	39°8	39°2	39°0
	22	31°1	31°3	32°5	33°8	35°3	36°7	37°7	38°3	37°1	36°8	36°3
	23	30°5	29°6	32°3	33°7	32°6	31°5	29°6	34°2	31°1	31°1	30°5
	24	20°0	21°0	22°0	21°8	23°0	24°0	24°1	25°4	26°8	27°0	28°0
	25	10°7	10°2	11°5	14°9	16°9	18°1	19°4	20°2	22°7	21°0	20°9
	26	13°0	12°9	19°0	25°2	27°9	27°6	27°9	28°6	30°5	30°8	30°5
	27	—	—	—	—	—	—	—	—	—	—	—
	28	26°4	26°8	27°6	28°7	29°8	31°1	32°1	32°8	33°5	35°4	35°6
Hourly Means	22°02	21°91	23°15	25°30	26°85	27°87	28°65	29°48	29°78	29°82	29°70	29°79

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
48°3	50°1	50°1	38°7	37°0	35°8	34°3	32°3	—	—	—	—	—	—	—	41°16
36°5	35°4	35°6	35°1	33°1	31°8	30°0	28°3	—	31°4	31°7	31°3	32°1	32°1	32°4	34°80
25°1	24°0	24°6	19°8	19°2	18°9	18°4	18°0	18°5	18°5	18°6	18°8	19°8	20°9	21°0	23°46
35°6	34°6	34°6	26°2	25°4	25°6	24°1	19°6	18°1	17°1	16°1	16°9	14°6	12°3	12°5	21°33
13°0	11°0	13°5	12°5	11°3	11°5	11°6	11°1	11°4	11°3	11°5	11°7	12°2	12°1	13°0	12°08
19°9	19°7	19°7	22°5	23°7	23°5	25°1	25°8	26°6	27°1	28°0	27°8	28°4	29°2	29°5	21°91
30°7	30°5	29°2	26°0	29°1	28°2	26°6	24°4	23°5	—	—	—	—	—	—	20°43
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0°9	0°6	—1°6	—5°0	—6°5	—7°4	—7°8	—7°9	—8°2	—8°2	—8°0	—5°1	—2°1	0°9	1°3	—4°90
22°3	21°6	21°1	20°8	20°8	21°0	21°2	21°4	21°3	21°1	21°2	20°6	20°2	14°6	9°7	18°70
26°0	25°7	21°9	21°0	25°2	25°6	25°6	26°9	27°2	26°9	27°9	28°1	30°5	31°1	31°7	23°25
36°3	36°2	—	36°2	36°3	36°2	36°1	36°3	36°3	36°6	36°7	36°5	36°7	36°9	36°5	35°46
38°4	38°4	38°2	38°7	39°2	39°4	39°8	40°2	40°0	39°8	40°9	40°0	39°9	40°2	39°9	38°82
47°1	45°1	41°8	39°9	35°6	34°6	34°6	33°7	34°0	—	—	—	—	—	—	37°38
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23°7	23°7	23°7	24°0	24°1	24°7	26°0	25°2	25°8	26°1	27°1	28°6	29°1	29°1	28°5	25°38
18°3	17°0	16°5	15°1	14°1	13°5	13°8	14°6	14°6	15°5	—	—	9°6	7°6	6°1	16°02
20°3	20°9	14°9	18°8	22°1	22°8	23°8	24°4	24°6	25°1	24°4	25°6	26°0	27°0	27°0	19°27
38°2	36°7	—	37°6	34°4	34°0	34°6	34°6	35°5	35°8	36°5	36°6	36°5	36°1	36°1	34°33
33°8	29°7	—	27°0	25°6	24°4	24°5	22°1	21°0	19°3	18°4	18°4	17°1	16°7	16°7	28°25
27°4	26°8	26°1	26°0	22°7	22°6	22°1	22°5	22°0	—	—	—	—	—	—	22°47
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30°7	30°8	—	28°0	27°0	26°6	26°4	26°4	26°4	26°0	24°9	26°0	26°0	26°6	27°0	26°83
38°0	36°7	—	37°8	35°8	35°8	35°4	36°0	35°6	35°9	36°2	36°5	36°9	37°7	37°1	35°04
39°7	40°0	39°2	40°0	40°5	39°1	39°1	38°5	38°7	37°5	36°7	37°1	37°9	37°9	38°0	38°54
40°2	—	—	37°3	36°3	34°6	35°2	35°2	34°8	34°2	34°0	34°0	32°8	32°8	31°1	36°99
33°2	34°2	—	33°3	33°9	33°1	32°9	28°1	26°5	26°0	25°5	25°2	25°1	25°6	24°9	30°05
29°3	30°3	26°1	28°6	28°4	28°2	28°1	27°8	27°8	—	—	—	—	—	—	29°61
38°8	35°1	—	36°9	29°1	29°1	27°2	25°8	25°6	24°1	24°4	23°2	23°2	23°0	23°3	30°69
39°19	29°76	18°	27°66	27°22	26°86	26°57	26°17	25°92	24°73	24°55	24°66	24°61	24°62	24°42	26°95
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26°0	26°0	27°	27°1	27°3	26°6	19°2	18°0	18°4	18°8	19°4	20°4	21°2	22°0	21°9	23°20
33°4	33°2	—	26°	32°8	32°6	32°6	32°1	32°6	33°0	32°9	32°8	31°9	31°6	31°3	31°02
37°5	36°5	—	35°	30°2	30°6	29°5	28°5	28°2	27°2	27°1	27°4	28°6	29°8	31°3	31°44
37°3	37°4	—	38°	35°9	34°0	33°8	32°8	31°9	29°7	28°6	28°0	28°2	27°6	26°5	33°62
26°4	25°7	25°	26°	24°6	24°2	24°1	24°0	24°2	—	—	—	—	—	—	24°75
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25°6	25°8	25°	27°0	26°6	19°2	19°6	18°4	18°4	16°9	16°9	16°0	16°9	17°8	18°1	20°49
26°2	25°7	25°	26°	24°6	24°6	24°8	24°9	24°2	23°3	22°2	19°7	18°6	21°4	22°0	23°07
30°9	30°5	18°	30°	29°6	31°5	30°5	29°4	28°2	26°8	25°6	26°6	26°0	25°2	23°8	27°81
16°0	15°3	15°	24°	12°6	12°4	12°2	12°2	9°8	7°6	6°1	4°8	3°1	2°3	1°7	11°86
12°1	12°6	12°6	22°	12°5	12°6	12°1	12°0	11°9	12°1	12°7	12°5	12°9	13°1	12°7	9°82
23°1	22°9	21°8	22°	17°7	17°3	15°8	15°2	14°4	—	—	—	—	—	—	19°70
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34°6	34°6	33°8	27°	24°5	29°6	28°4	28°2	27°0	25°9	25°3	24°5	24°8	22°0	22°0	27°88
28°0	29°1	18°1	25°	25°9	25°2	22°8	22°5	22°0	21°0	20°4	19°8	19°8	19°6	20°8	23°34
33°1	32°9	31°6	28°2	26°7	25°8	25°8	25°4	24°6	24°3	23°8	24°4	24°0	22°7	22°2	27°38
34°0	33°5	31°7	28°3	27°8	27°4	26°2	25°9	24°7	23°5	22°5	21°4	20°6	19°6	21°4	27°26
34°2	33°1	31°2	29°7	29°7	29°4	29°2	30°3	30°3	30°3	29°4	29°8	29°6	29°4	29°1	30°01
36°0	34°9	33°5	37°8	34°8	35°2	35°0	35°0	35°8	—	—	—	—	—	—	34°85
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
39°2	36°0	35°1	34°1	34°0	34°0	33°9	34°2	33°2	33°6	33°4	31°3	30°9	31°1	30°9	34°93
36°8	36°3	35°7	34°8	34°1	33°8	33°8	32°8	33°6	32°8	32°8	32°8	32°9	31°5	31°4	34°14
31°1	30°5	29°1	28°2	27°2	26°8	26°9	26°6	26°6	24°2	24°4	23°6	22°5	20°6	20°6	28°10
27°0	28°0	29°2	27°	27°4	26°8	24°8	20°2	19°8	19°4	17°9	16°3	15°4	12°7	11°5	21°22
21°0	20°9	20°1	19°0	18°8	17°7	16°5	16°1	16°5	17°1	15°6	15°1	14°9	14°2	13°3	16°74
30°8	30°5	30°3	29°6	28°3	28°2	28°0	27°8	27°2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35°4	35°6	34°6	33°1	32°5	32°8	32°1	30°9	29°9	27°6	26°0	23°3	21°8	22°1	20°6	29°47
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29°82	29°70	28°79	27°46	26°50	26°05	25°62	25°14	24°73	23°94	23°37	22°84	22°53	22°23	22°35	25°67



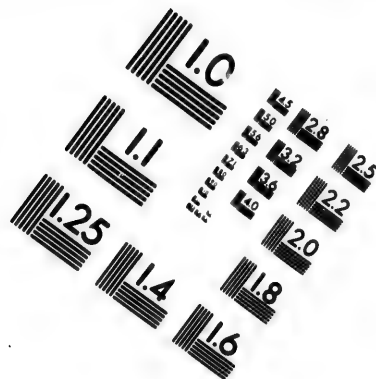
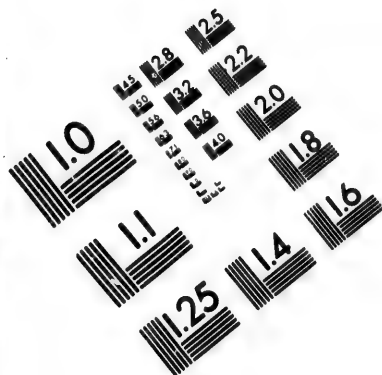
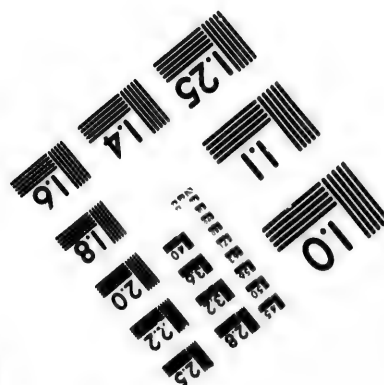
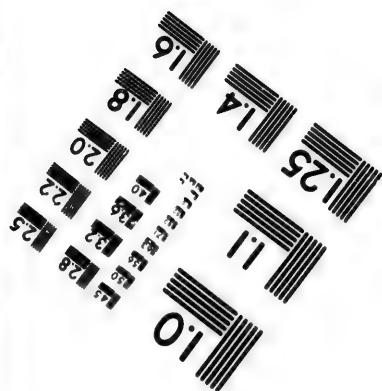
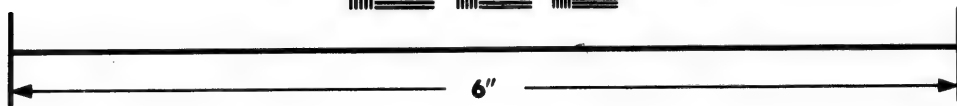
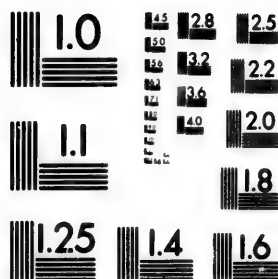


IMAGE EVALUATION TEST TARGET (MT-3)



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18 20 22 25 28 32 36 40 45 50 56 63 71 80 90 100

10 01

WET THERMOMETER.												
Hours of Mean Gaitingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	1	10°2	7°8	9°7	10°7	12°3	14°6	17°0	18°6	18°8	18°8	17°1
	2	8°5	9°4	11°9	13°8	16°0	15°6	17°9	19°8	20°8	19°8	17°9
	3	19°0	19°1	18°2	19°0	19°6	21°7	23°1	23°7	25°4	25°3	22°2
	4	17°9	17°5	18°8	20°0	22°5	22°3	23°0	22°3	22°8	21°7	18°9
	5	—	—	—	—	—	—	—	—	—	—	—
	6	20°0	20°2	21°0	22°0	23°8	25°1	25°4	26°8	29°4	28°2	29°9
	7	17°6	19°8	23°8	29°4	32°8	33°6	35°7	36°2	37°5	37°7	37°2
	8	34°6	35°0	36°6	37°1	39°3	40°3	39°9	41°0	40°4	44°0	35°8
	9	23°2	22°7	23°7	24°6	25°3	24°2	25°4	25°2	26°0	26°7	25°6
	10	15°8	15°8	15°7	17°7	19°4	21°8	23°5	25°2	29°2	26°9	26°8
	11	16°6	17°7	20°3	24°0	26°1	27°2	30°8	31°5	30°5	30°9	30°6
	12	—	—	—	—	—	—	—	—	—	—	—
	13	23°1	23°4	22°2	22°5	21°8	21°6	22°4	24°2	23°8	22°6	21°4
	14	11°2	10°4	11°5	12°4	14°0	14°0	14°8	14°6	14°0	12°3	11°6
	15	3°0	4°1	5°9	7°6	10°4	10°7	14°0	15°6	15°0	15°6	15°2
	16	11°7	13°1	16°0	19°6	20°9	22°1	23°2	24°5	25°4	26°0	25°9
	17	22°7	23°5	23°2	23°4	23°4	23°4	23°5	23°5	23°0	23°4	24°0
	18	18°4	21°6	23°4	26°6	28°1	29°2	29°6	31°7	31°7	32°1	31°9
	19	—	—	—	—	—	—	—	—	—	—	—
	20	25°2	26°8	31°0	32°6	33°2	33°4	33°4	34°0	34°9	35°7	36°2
	21	38°7	38°5	38°2	40°2	42°2	42°9	43°3	44°7	44°2	44°0	42°5
	22	29°4	31°1	32°5	33°6	33°8	34°0	34°8	34°8	34°6	34°8	33°8
	23	31°9	31°9	31°9	32°6	34°4	34°7	37°3	38°1	36°7	37°3	36°7
	24	26°7	29°8	32°6	33°9	34°9	36°2	37°1	37°8	35°6	36°3	36°9
	25	34°7	35°5	37°7	38°1	36°7	37°2	37°5	37°5	39°0	40°9	41°0
	26	—	—	—	—	—	—	—	—	—	—	—
	27	32°6	32°6	32°8	29°9	30°7	31°9	35°6	36°2	36°7	36°3	35°0
	28	26°9	28°6	32°1	33°0	36°0	38°3	39°8	39°0	40°8	40°9	40°8
	29	31°7	35°5	39°8	41°9	43°6	44°0	46°1	47°4	51°5	48°3	50°1
	30	31°1	34°6	36°0	37°0	37°7	37°9	38°6	38°2	39°2	40°2	41°0
	31	35°8	37°7	40°8	45°4	47°9	50°6	52°5	53°1	55°3	59°4	56°7
Hourly Means		22°90	23°84	25°46	26°99	28°40	29°20	30°56	31°30	31°93	32°09	31°57
APRIL.	1	31°3	33°2	32°1	32°1	32°7	34°8	34°2	33°9	34°0	34°0	32°6
	2	—	—	—	—	—	—	—	—	—	—	—
	3	31°7	36°7	38°7	39°6	41°0	41°6	41°2	41°8	41°9	42°3	43°7
	4	41°1	42°0	42°0	43°5	43°9	43°9	44°7	44°8	47°3	46°1	44°6
	5	32°5	32°1	32°3	33°0	33°8	35°2	40°1	38°8	38°7	38°2	36°9
	6	27°4	31°4	33°9	38°3	38°9	40°2	41°8	41°8	41°8	42°3	42°8
	7	32°5	34°8	36°7	38°9	41°4	41°4	40°4	38°9	39°4	40°0	39°2
	8	27°6	32°1	37°4	40°2	40°8	42°0	42°9	43°1	45°6	45°8	45°2
	9	—	—	—	—	—	—	—	—	—	—	—
	10	36°7	42°1	46°6	52°4	50°9	55°1	54°3	55°0	53°6	53°0	53°7
	11	42°3	42°0	43°5	42°0	42°4	42°6	43°4	42°8	44°3	43°5	42°0
	12	31°4	37°0	39°1	43°3	44°5	45°4	45°6	46°8	47°2	46°2	44°9
	13	34°2	35°0	35°6	35°2	37°0	37°0	38°3	39°1	38°3	38°1	37°7
	14	36°5	37°9	38°1	40°1	39°8	39°8	41°3	44°4	42°7	42°8	42°5
	15	37°2	39°6	42°3	44°0	45°4	45°9	46°6	46°6	46°4	45°6	43°9
	16	—	—	—	—	—	—	—	—	—	—	—
	17	30°5	31°8	32°7	33°4	35°1	35°9	36°9	40°4	39°8	38°3	39°2
	18	28°7	28°6	30°5	30°7	31°3	32°8	29°8	28°2	28°4	29°0	29°7
	19	25°8	30°5	30°7	29°2	32°4	32°8	35°1	34°6	34°6	34°4	34°3
	20	26°4	29°2	33°2	36°3	37°9	39°2	42°5	42°0	44°8	45°6	43°4
	21	—	—	—	—	—	—	—	—	—	—	—
	22	38°6	38°9	40°1	40°6	40°4	40°7	43°0	44°1	44°3	42°7	43°8
	23	—	—	—	—	—	—	—	—	—	—	—
	24	31°5	32°1	33°0	36°9	28°7	39°4	37°9	36°7	36°2	36°3	35°8
	25	27°4	31°3	33°4	37°7	37°7	38°5	39°6	40°8	40°8	40°2	40°4
	26	31°7	33°4	34°6	35°7	39°2	39°9	40°0	39°7	41°3	40°2	41°3
	27	29°2	35°0	39°7	41°4	42°5	44°4	44°2	44°0	44°9	44°9	43°8
	28	36°3	37°5	38°0	39°1	39°8	40°6	39°8	39°4	40°4	42°3	42°7
	29	42°5	42°1	40°6	39°4	40°0	40°7	42°0	42°5	41°4	41°6	40°6
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		32°97	35°26	36°27	38°46	39°48	40°41	41°07	41°26	41°39	41°39	41°15

* Good Friday.

9	10	11
3	4	5
18.8	18.1	17.1
20.2	19.8	17.9
25.3	24.4	22.2
21.7	20.4	18.9
—	—	—
28.2	28.7	29.9
37.7	36.5	37.2
44.0	39.1	35.8
26.7	26.4	25.6
26.9	26.8	26.0
30.9	30.6	30.9
—	—	—
22.6	21.4	21.4
12.3	11.6	10.4
15.6	15.2	14.2
26.0	25.9	25.3
23.4	24.0	24.0
32.1	31.9	31.3
—	—	—
35.7	36.2	36.5
44.0	42.5	41.6
34.8	34.9	33.8
37.3	36.7	36.7
36.3	36.9	36.2
40.9	40.8	41.0
—	—	—
36.3	35.0	34.2
40.9	40.3	40.8
48.3	49.2	50.1
40.2	41.0	41.0
59.4	58.2	56.7
32.09	31.57	30.99
34.0	32.6	32.5
42.3	43.7	43.5
46.1	44.6	43.9
38.2	36.9	37.7
42.3	42.8	42.0
40.0	39.2	39.2
45.8	45.2	45.2
—	—	—
53.0	53.7	51.7
43.5	42.0	42.3
46.2	46.0	44.9
38.1	37.7	37.3
42.8	42.5	40.6
45.6	45.6	43.9
—	—	—
38.3	39.2	39.4
29.0	29.9	29.7
34.4	34.3	35.5
45.6	43.9	43.4
—	—	—
42.7	43.3	45.7
—	—	—
36.3	35.8	34.4
40.2	40.4	39.1
40.2	41.3	40.6
44.9	43.8	42.5
42.3	42.7	42.5
41.6	40.6	39.9
—	—	—
41.39	41.15	40.73

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
15.1	14.0	12.6	8.2	12.3	11.7	7.1	1.7	5.1	8.6	9.0	9.5	12.03	
16.1	15.6	15.6	16.3	16.1	16.7	18.1	18.6	19.2	19.6	19.7	19.6	16.78	
20.8	19.8	17.9	17.5	16.9	16.6	17.5	17.5	19.6	20.0	20.2	18.1	20.13	
17.9	17.2	17.7	17.7	17.9	16.9	—	—	—	—	—	—	19.85	
—	—	—	—	—	—	19.7	20.6	21.6	19.6	19.9	21.6	—	
29.4	26.2	22.9	20.5	20.6	20.4	17.9	18.1	18.1	18.2	17.9	16.9	22.82	
36.5	36.0	35.8	36.2	36.5	36.3	36.0	36.1	36.3	35.8	35.7	34.8	33.74	
35.2	34.8	34.4	34.2	34.4	34.0	33.4	31.6	28.2	27.4	26.4	26.0	35.13	
25.2	25.5	24.8	25.1	24.2	23.3	23.0	22.8	19.4	19.4	17.7	17.3	23.61	
24.8	23.5	21.6	20.4	20.1	20.2	20.0	18.8	18.1	16.9	16.2	17.3	20.90	
30.5	28.6	28.3	28.5	29.0	28.4	—	—	—	—	—	—	—	
—	—	—	—	—	—	30.9	28.4	26.8	25.3	24.2	23.3	27.05	
18.1	18.7	16.9	16.4	15.7	15.1	14.6	13.9	13.1	12.7	12.5	12.2	18.76	
7.6	6.5	6.3	5.9	5.7	5.5	5.5	5.1	4.4	4.2	4.3	3.4	8.98	
13.1	11.3	11.1	10.7	10.0	9.4	9.4	9.0	8.4	8.0	10.0	10.9	10.53	
23.8	23.6	23.7	23.5	24.0	23.7	23.5	24.0	23.4	23.3	23.1	23.1	22.35	
23.5	22.5	20.8	20.6	19.4	18.1	18.4	16.7	16.2	17.4	17.9	18.4	21.29	
31.3	29.1	29.0	29.4	29.4	29.2	—	—	—	—	—	—	—	
—	—	—	—	—	—	27.5	24.8	25.4	25.1	24.6	24.3	27.70	
37.0	37.0	36.5	36.2	35.6	35.2	35.4	35.8	36.9	42.3	42.3	42.1	35.22	
37.7	34.8	34.2	33.5	32.4	31.7	30.7	30.5	29.8	29.6	28.6	28.6	36.80	
33.4	32.6	32.4	31.5	31.3	31.7	31.5	31.6	31.7	31.7	31.9	31.8	32.72	
34.2	32.8	31.1	29.6	28.6	27.8	27.6	27.2	26.8	26.8	26.4	26.4	31.90	
34.2	32.6	32.9	33.8	33.8	34.2	34.8	34.9	34.4	34.5	34.8	34.8	34.32	
40.6	40.4	40.6	40.4	40.0	39.8	—	—	—	—	—	—	—	
—	—	—	—	—	—	33.8	32.8	32.1	31.3	30.7	30.5	37.07	
33.8	33.0	32.7	31.8	29.9	29.5	29.3	28.5	27.1	27.2	27.1	26.6	31.75	
39.6	38.7	38.8	38.8	38.8	37.9	37.4	35.8	37.3	36.2	35.2	32.6	36.82	
48.3	42.5	40.2	37.9	36.5	35.0	33.1	31.5	30.7	30.7	29.6	29.4	39.77	
39.8	38.3	38.1	38.1	38.3	37.9	37.5	37.3	36.9	36.5	35.9	35.1	37.59	
53.9	51.1	49.1	48.6	46.0	39.4	36.0	35.6	34.3	33.8	32.9	32.8	45.29	
29.68	28.40	27.63	27.09	26.79	26.13	25.54	24.79	24.49	24.52	24.25	23.98	27.44	
32.5	31.5	31.5	31.5	31.6	31.3	—	—	—	—	—	—	—	
—	—	—	—	—	—	33.8	32.7	32.6	32.8	32.6	31.3	32.63	
42.7	42.3	42.5	42.1	41.4	42.1	42.5	42.0	41.7	41.4	41.9	41.4	41.15	
42.3	41.6	40.2	37.9	36.2	35.6	35.2	33.8	33.3	32.8	31.9	30.9	39.99	
36.7	36.5	34.2	32.6	31.9	30.5	28.9	27.8	27.0	27.2	26.7	26.5	33.16	
40.2	38.5	37.3	36.2	34.9	34.6	33.6	32.8	32.8	32.8	32.7	32.7	36.74	
39.8	36.2	34.6	33.0	33.9	33.3	31.6	31.3	31.5	28.2	27.9	26.6	35.45	
46.2	42.5	39.9	38.1	37.7	37.7	—	—	—	—	—	—	—	
—	—	—	—	—	—	38.4	37.7	36.7	35.6	35.4	35.2	39.54	
51.1	50.1	49.3	45.2	45.0	43.5	44.1	45.0	45.0	45.2	44.0	42.3	48.12	
42.5	43.3	43.3	45.0	47.0	46.4	41.8	38.3	36.0	33.4	34.6	30.7	41.48	
44.1	43.1	42.7	43.1	43.9	43.3	42.7	42.5	42.1	40.2	37.5	36.7	42.47	
37.0	36.7	35.6	35.8	35.7	35.4	35.9	35.8	35.0	36.1	36.1	36.2	36.42	
40.4	38.7	36.8	36.2	38.3	37.9	35.0	33.8	36.5	36.7	36.4	37.2	38.77	
42.5	40.6	39.1	38.7	38.7	38.1	—	—	—	—	—	—	—	
—	—	—	—	—	—	36.5	35.6	33.8	32.8	31.7	29.8	40.30	
37.7	36.3	35.4	35.3	35.1	35.0	34.0	35.2	34.1	32.6	31.3	29.4	35.20	
28.2	27.9	28.4	29.5	29.2	27.2	25.4	23.8	24.6	23.5	23.5	23.2	28.00	
35.0	33.0	30.6	31.6	28.4	26.9	26.3	25.8	25.1	25.1	25.2	24.6	30.31	
41.9	39.5	37.9	37.5	36.5	36.6	—	—	—	—	—	—	—	
—	—	—	—	—	—	43.7	43.2	42.3	41.4	41.2	39.1	39.38	
45.6	41.6	38.3	36.5	35.2	32.8	—	—	—	—	—	—	—	
—	—	—	—	—	—	30.3	31.2	32.8	33.3	33.1	32.3	38.56	
37.5	36.7	34.9	32.9	30.8	29.2	28.2	28.2	28.2	25.8	25.6	25.3	33.01	
38.7	38.0	37.7	37.7	37.3	37.1	36.7	36.0	33.8	31.9	30.5	28.5	36.28	
37.6	35.2	36.5	35.4	35.0	32.1	30.3	27.8	27.4	26.8	26.4	26.7	34.78	
41.6	39.9	39.2	37.9	36.2	35.2	35.6	35.3	35.0	35.2	35.6	36.0	39.13	
42.9	41.8	41.2	41.4	42.3	42.3	42.6	42.5	42.5	42.3	42.1	42.0	41.01	
39.6	37.8	36.5	34.8	34.6	31.6	—	—	—	—	—	—	—	
—	—	—	—	—	—	34.4	33.8	33.4	32.8	36.2	36.7	38.15	
40.18	38.72	37.65	36.91	36.53	35.65	35.31	34.66	34.30	33.58	33.34	32.55	37.50	

WET THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1	38°3	40°2	41°4	44°3	44°9	45°6	45°9	44°4	43°5	45°2	46°5
	2	41°2	42°1	44°1	47°8	49°9	49°0	49°7	50°2	50°4	49°4	48°9
	3	44°0	49°5	50°9	52°0	53°6	54°1	53°9	52°4	52°1	54°8	53°7
	4	44°1	45°3	48°1	50°9	50°7	51°1	49°8	48°8	48°6	48°8	47°6
	5	52°5	57°5	58°2	61°8	63°0	63°8	63°6	64°0	61°4	62°8	62°9
	6	51°7	57°5	59°9	61°0	61°4	64°2	64°4	64°9	66°8	64°7	62°4
	7	—	—	—	—	—	—	—	—	—	—	—
	8	39°3	41°4	43°9	47°2	46°6	47°5	48°7	48°6	48°2	48°1	49°3
	9	42°5	46°7	50°1	51°2	51°0	51°8	52°9	54°4	53°1	51°2	52°6
	10	45°2	46°4	46°9	47°4	48°0	48°2	48°8	50°2	51°2	50°2	50°2
	11	45°2	45°2	45°4	46°1	46°6	46°6	46°6	45°6	46°2	46°0	47°0
	12	37°7	39°4	40°4	42°3	43°3	44°3	44°0	44°2	44°9	46°4	46°9
	13	33°6	36°3	38°3	38°5	39°8	42°1	43°6	46°2	44°2	43°0	41°0
	14	—	—	—	—	—	—	—	—	—	—	—
	15	37°0	41°8	45°1	46°4	47°8	50°0	49°2	49°3	47°6	45°6	45°6
	16	49°0	50°9	51°6	52°1	54°4	55°7	56°2	55°6	54°7	54°0	55°7
	17	42°0	49°7	51°2	52°6	53°6	55°5	55°8	56°7	58°0	57°8	57°4
	18	49°9	55°7	56°7	58°4	59°7	59°0	60°6	60°8	62°7	62°0	62°0
	19	54°6	55°8	59°9	61°9	63°6	66°1	65°7	65°3	66°5	63°9	63°1
	20	58°6	58°6	62°6	67°1	66°6	66°9	70°6	67°4	68°4	66°3	64°7
	21	—	—	—	—	—	—	—	—	—	—	—
	22	55°1	50°8	50°9	55°7	56°5	56°5	55°7	56°1	56°2	56°3	55°0
	23	53°9	52°3	51°9	49°6	49°3	49°3	49°9	50°7	52°1	54°7	55°1
	24	53°7	54°1	56°5	59°2	63°5	64°7	62°7	65°3	64°0	63°7	65°3
	25	54°2	55°9	57°5	59°3	63°0	64°3	64°8	64°5	65°7	65°1	62°3
	26	48°3	48°9	49°6	50°2	51°3	54°3	58°1	59°9	58°1	55°3	53°9
	27	48°0	49°6	53°7	56°3	56°7	57°4	57°2	58°5	58°9	57°1	58°1
	28	—	—	—	—	—	—	—	—	—	—	—
	29	57°9	60°9	60°5	62°0	65°9	61°7	67°5	68°1	67°1	68°8	69°1
	30	52°9	55°0	55°0	55°1	54°2	56°1	56°5	54°6	51°6	49°8	48°5
	31	38°8	40°2	40°2	42°1	43°1	44°6	43°3	45°3	43°8	44°5	45°7
Hourly Means		47°01	49°17	50°76	52°54	53°63	54°61	55°03	55°26	55°04	54°65	54°45
JUNE.	1	42°9	44°2	45°3	45°7	45°5	46°3	47°8	47°0	50°9	52°5	53°9
	2	46°2	51°4	54°3	56°5	58°3	59°7	60°1	60°8	61°0	60°3	58°8
	3	64°1	63°9	63°9	65°2	65°5	65°5	66°2	65°9	66°3	66°3	66°1
	4	—	—	—	—	—	—	—	—	—	—	—
	5	54°0	55°8	59°7	60°1	60°3	61°7	61°9	57°7	56°9	61°3	62°4
	6	46°4	48°2	48°4	49°4	48°4	49°1	50°0	50°4	49°4	49°9	49°1
	7	43°2	44°6	45°7	47°1	48°7	50°1	52°0	52°2	53°1	53°5	52°3
	8	48°0	51°2	54°2	55°9	59°3	60°1	59°3	59°3	59°6	60°7	62°5
	9	52°9	56°8	61°9	61°9	62°1	63°0	63°5	63°5	63°9	64°6	65°7
	10	58°0	59°4	58°8	61°3	64°4	63°3	63°3	64°4	64°6	64°4	62°0
	11	—	—	—	—	—	—	—	—	—	—	—
	12	43°6	43°2	42°8	43°1	43°9	43°4	44°8	45°4	45°7	46°9	46°4
	13	41°1	40°6	43°2	42°9	45°1	46°0	46°8	47°2	46°4	47°3	47°2
	14	42°4	42°4	46°4	50°3	50°9	54°8	53°4	53°5	56°2	57°3	59°0
	15	59°3	63°7	68°6	70°1	72°4	70°7	72°1	71°7	71°1	70°9	68°9
	16	68°4	69°3	71°1	72°4	73°4	75°6	72°4	74°1	74°0	74°1	72°3
	17	64°9	69°0	70°9	71°5	73°3	74°3	74°7	72°3	71°3	73°3	71°3
	18	—	—	—	—	—	—	—	—	—	—	—
	19	63°8	65°0	66°5	69°5	69°9	71°5	71°7	71°7	69°3	69°3	70°5
	20	61°7	64°3	66°5	67°5	69°2	67°9	69°5	67°7	67°6	66°5	67°5
	21	57°2	60°8	59°9	61°9	61°5	60°5	61°5	61°9	61°0	61°4	62°3
	22	55°7	57°3	63°1	64°9	63°6	63°8	64°6	65°8	64°5	64°3	63°9
	23	60°9	62°1	63°6	64°3	66°7	69°0	68°5	70°3	66°3	64°1	60°9
	24	56°1	57°3	57°9	56°5	56°3	57°0	56°4	55°9	55°9	56°9	54°5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	60°3	64°9	67°9	68°8	70°1	70°4	71°4	71°4	71°1	70°6	70°9
	27	58°2	63°0	66°1	68°5	69°1	68°9	70°1	70°9	70°9	70°1	70°9
	28	68°9	68°1	69°7	70°2	69°7	68°7	65°0	65°3	64°6	66°1	64°5
	29	56°5	59°8	63°5	66°3	66°3	65°6	66°3	67°3	68°1	67°9	67°1
	30	56°9	58°9	64°2	64°8	66°0	67°3	65°9	66°3	67°0	68°1	67°5
Hourly Means		55°06	57°12	59°39	60°64	61°53	62°08	62°28	62°30	62°17	62°65	62°28

WET THERMOMETER.

9	10	11
3	4	5
45°2	46°5	46°3
49°4	48°9	49°6
54°8	53°7	52°3
48°8	47°6	48°4
62°8	62°9	59°4
64°7	62°4	62°9
—	—	—
48°1	49°3	48°8
51°2	52°6	50°2
50°2	50°2	49°8
46°0	47°0	46°6
46°4	46°9	47°4
43°0	41°0	39°0
45°6	45°6	46°5
54°0	55°7	55°2
57°8	57°4	55°6
62°0	62°0	62°5
63°9	63°1	65°3
66°3	64°7	66°0
—	—	—
56°3	55°0	56°9
54°7	54°7	55°1
63°7	65°3	62°4
65°1	62°3	63°7
55°3	53°9	54°5
57°1	58°1	56°7
—	—	—
68°8	69°1	70°3
49°8	48°5	46°9
44°5	45°7	46°4
54°65	54°45	54°25
52°5	53°9	55°7
60°3	58°8	60°3
66°3	66°1	65°3
—	—	—
61°3	62°4	58°0
49°9	49°1	47°4
53°5	52°3	52°2
60°7	62°5	59°5
64°6	65°7	64°9
64°4	62°0	64°4
—	—	—
46°9	46°4	45°6
47°3	47°2	46°6
57°3	59°0	58°1
70°9	68°9	68°5
74°1	72°3	72°5
73°3	71°3	72°7
—	—	—
69°3	70°5	69°0
66°5	67°5	58°6
61°4	62°3	62°0
64°3	63°9	61°1
64°1	60°9	60°7
56°9	54°5	54°1
—	—	—
70°6	70°9	70°1
70°1	70°9	66°2
66°1	64°5	62°1
68°1	67°9	67°1
68°1	67°5	68°5
62°65	62°28	61°20

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
45°2	42°6	41°3	39°7	39°4	38°8	38°6	37°5	36°7	36°9	36°6	36°8	41°53
48°4	46°0	43°4	41°4	40°2	38°7	43°6	44°1	42°4	39°8	37°8	39°6	44°90
51°0	48°4	46°7	45°0	43°2	42°2	43°4	41°8	41°7	41°7	39°8	38°8	47°79
49°6	50°2	51°1	50°9	51°2	51°0	50°1	49°4	49°4	49°4	49°0	47°2	49°20
57°6	54°9	58°8	59°0	54°2	54°4	53°6	53°4	50°7	49°5	48°0	47°2	57°18
58°4	60°1	60°1	58°4	57°4	55°8	—	—	—	—	—	—	—
—	—	—	—	—	—	45°0	37°8	36°6	35°4	36°2	36°8	54°99
47°0	45°8	44°2	44°2	44°6	44°9	44°4	42°8	41°0	39°0	38°6	38°6	44°70
50°0	49°6	49°4	48°6	48°4	47°4	44°8	42°8	45°4	45°8	45°7	43°4	48°71
48°6	48°2	47°6	46°7	46°2	46°6	46°6	46°6	46°4	46°2	46°0	46°0	47°68
45°5	44°2	42°7	42°3	41°4	40°8	40°2	40°1	38°9	38°4	37°2	36°9	43°40
45°9	43°2	39°6	37°3	36°8	34°2	33°4	30°6	30°6	31°6	30°0	31°4	39°41
37°4	38°6	39°4	39°6	40°0	39°8	—	—	—	—	—	—	—
—	—	—	—	—	—	38°4	35°4	33°0	31°2	31°2	32°0	38°40
45°9	46°6	44°6	45°2	45°6	45°8	46°2	46°9	47°0	47°0	46°7	47°1	46°19
53°6	52°0	49°6	48°6	46°1	44°4	42°8	40°4	38°2	38°4	36°7	37°4	48°89
52°7	51°2	50°5	49°4	47°9	47°1	47°8	47°0	46°4	44°6	44°0	43°9	50°77
62°2	58°9	55°4	53°4	52°6	51°1	50°2	49°4	49°0	49°0	49°3	50°2	55°86
65°1	60°9	55°9	56°8	58°3	58°2	57°5	57°2	57°1	56°7	55°7	56°3	60°31
65°6	65°6	62°4	56°7	57°7	59°6	—	—	—	—	—	—	—
—	—	—	—	—	—	59°3	59°1	58°9	58°6	57°8	56°9	62°58
55°1	53°4	52°1	49°9	50°5	52°9	51°7	52°9	52°7	52°4	52°1	52°1	53°73
54°2	51°8	51°3	52°3	51°7	51°2	52°2	52°4	54°4	53°9	55°9	54°9	52°49
59°7	58°8	56°7	54°5	54°7	54°1	53°3	51°9	51°5	50°3	50°1	52°3	57°63
59°9	57°6	54°9	50°7	50°1	48°6	48°6	48°0	48°0	47°0	44°6	45°1	55°98
53°9	52°2	49°4	45°5	46°4	45°5	45°2	45°0	44°2	44°1	43°7	43°8	50°05
39°1	56°9	51°5	50°5	50°2	50°1	—	—	—	—	—	—	—
—	—	—	—	—	—	54°9	53°9	53°9	53°9	53°3	52°7	54°55
70°6	67°0	63°0	59°6	57°8	54°7	52°3	51°9	51°3	49°7	48°2	47°4	60°56
45°6	44°5	43°6	43°3	44°0	43°8	41°4	39°8	40°0	39°2	38°6	38°8	47°45
46°0	45°8	46°0	45°0	42°4	42°2	42°1	40°4	38°8	38°4	37°6	38°3	42°54
53°10	51°67	50°04	48°69	48°11	47°55	46°95	45°80	45°34	44°74	44°09	44°14	50°27
52°5	51°5	46°8	43°6	44°4	44°8	43°4	43°5	42°3	42°6	40°7	41°0	46°45
39°9	59°5	58°5	55°9	58°0	59°8	59°4	59°1	57°2	58°3	59°9	62°3	58°15
64°2	60°9	60°9	59°8	58°7	56°9	—	—	—	—	—	—	—
—	—	—	—	—	—	57°9	57°9	57°7	57°3	52°9	49°6	61°62
54°3	54°4	51°2	50°9	50°1	48°8	47°6	45°8	45°3	44°3	44°5	45°6	53°86
47°0	45°8	45°4	45°2	42°0	43°6	42°5	41°2	40°5	39°7	40°0	40°1	45°80
52°1	48°7	48°0	46°0	45°5	45°4	45°5	45°2	44°8	44°4	44°3	44°7	47°89
55°7	55°7	55°1	54°9	54°6	53°5	53°4	50°7	49°9	49°0	47°7	48°0	54°91
63°2	60°2	57°9	57°5	56°6	55°7	55°5	54°9	53°9	54°9	54°3	54°7	59°33
64°9	60°6	58°3	57°9	53°9	50°9	—	—	—	—	—	—	—
—	—	—	—	—	—	46°0	44°6	43°6	42°4	41°6	41°2	56°43
45°0	43°6	42°4	41°2	39°6	40°6	39°0	36°7	38°6	38°6	38°8	39°7	42°44
46°1	45°2	44°6	44°2	44°0	42°6	42°5	41°5	40°3	38°6	38°4	38°0	43°60
59°0	60°3	55°6	53°1	51°9	51°5	50°6	50°2	49°0	47°4	50°0	51°2	51°85
69°5	68°1	69°2	65°7	64°9	65°7	65°9	68°3	67°7	66°5	65°5	65°8	67°95
75°9	71°4	69°9	66°6	66°5	65°9	64°9	63°4	62°4	60°5	58°9	59°1	68°96
69°9	66°8	64°9	64°3	64°1	64°0	—	—	—	—	—	—	—
—	—	—	—	—	—	62°7	62°5	62°9	63°7	61°1	60°8	67°80
67°1	66°2	64°5	63°8	63°3	62°7	62°7	61°3	59°7	58°9	59°0	59°9	52°83
62°1	61°1	61°1	60°5	59°6	57°9	56°1	55°5	52°9	51°9	53°3	53°7	61°68
59°8	59°1	56°5	55°9	54°5	53°4	51°7	51°7	51°9	51°7	51°9	53°0	57°63
59°3	60°3	58°7	58°0	57°8	57°1	57°7	57°9	58°7	58°9	60°7	60°7	60°77
60°5	58°5	57°0	56°3	55°5	54°3	55°1	55°4	55°1	54°8	54°1	53°9	60°33
53°3	53°1	50°1	48°7	46°6	46°5	—	—	—	—	—	—	—
—	—	—	—	—	—	58°1	57°3	55°7	55°9	55°9	56°7	54°70
64°9	62°5	60°7	59°3	60°1	61°2	60°2	59°9	58°9	55°9	55°9	58°0	64°39
66°7	69°1	68°7	66°8	66°1	63°9	63°9	66°5	66°1	65°9	66°5	68°6	67°15
62°9	62°9	61°7	59°7	58°7	57°3	55°9	54°4	54°2	54°1	53°3	53°0	62°13
66°4	64°2	63°9	57°6	56°1	54°9	54°1	53°0	51°2	49°8	51°7	53°1	60°78
67°7	66°1	65°7	64°5	66°3	65°5	63°8	62°7	61°7	59°3	55°9	51°0	63°82
60°38	59°07	57°59	56°07	55°36	54°78	54°47	53°89	53°16	52°51	52°18	52°44	57°96

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1 76	81	82	86	93	89	79	74	87	98	95	96
	2 100	100	100	91	96	91	92	95	96	95	94	94
	3 89	86	90	83	87	82	73	70	66	73	83	73
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 94	92	94	96	90	84	80	79	75	84	88	90
	6 94	95	97	93	92	87	92	86	86	79	90	94
	7 95	99	98	96	99	95	95	95	99	100	100	97
	8 95	86	81	83	83	80	71	78	81	79	84	86
	9 92	94	90	91	77	84	79	79	84	90	86	88
	10 85	86	84	95	86	82	84	83	93	82	81	84
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 87	83	86	82	96	66	75	68	72	76	73	75
	13 93	90	83	90	88	75	68	64	69	71	72	78
	14 78	84	90	93	86	87	79	78	73	75	76	78
	15 93	95	93	89	80	71	76	76	70	71	80	78
	16 86	84	83	84	80	76	80	78	78	76	75	79
	17 76	78	70	73	75	69	71	60	65	63	68	60
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 72	58	56	81	61	79	66	66	73	75	78	81
	20 85	88	83	91	91	87	91	87	87	92	93	87
	21 89	91	90	93	92	88	88	94	94	94	90	83
	22 87	52	68	100	80	88	96	85	64	69	68	67
	23 85	87	90	85	82	84	83	70	82	76	83	86
	24 81	81	82	77	74	67	83	85	87	74	77	88
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 98	98	97	99	94	95	99	96	97	97	97	93
	27 85	87	90	84	80	80	83	81	78	78	86	86
	28 87	90	90	89	86	83	76	79	73	75	88	83
	29 91	87	86	90	80	80	80	79	86	92	90	90
	30 100	98	99	99	91	97	98	97	94	95	98	95
	31 73	72	74	78	79	85	66	66	76	77	57	63
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	88	86	86	89	85	83	82	80	81	82	83	83
Tension of the Vapour. JANUARY.	1 In. .121	In. .131	In. .135	In. .150	In. .163	In. .166	In. .144	In. .139	In. .158	In. .179	In. .178	In. .189
	2 .213	.221	.223	.203	.228	.206	.199	.205	.202	.200	.194	.194
	3 .149	.146	.153	.145	.156	.162	.150	.145	.141	.154	.171	.150
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 .146	.143	.144	.161	.165	.156	.158	.165	.156	.172	.176	.170
	6 .138	.160	.166	.168	.172	.166	.181	.171	.171	.159	.167	.174
	7 .192	.199	.197	.201	.209	.205	.206	.207	.210	.214	.207	.197
	8 .181	.168	.161	.164	.162	.160	.151	.153	.161	.154	.162	.162
	9 .144	.145	.136	.139	.119	.128	.119	.126	.126	.145	.146	.149
	10 .139	.145	.144	.156	.148	.140	.147	.152	.159	.143	.135	.139
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 .120	.115	.118	.111	.120	.095	.120	.102	.106	.106	.098	.099
	13 .066	.065	.068	.076	.090	.087	.088	.085	.093	.095	.092	.092
	14 .123	.129	.138	.146	.143	.157	.149	.154	.177	.154	.155	.141
	15 .096	.128	.146	.159	.160	.148	.168	.180	.174	.181	.186	.183
	16 .148	.149	.145	.149	.145	.136	.134	.125	.122	.112	.109	.112
	17 .059	.060	.050	.051	.055	.051	.053	.046	.050	.051	.051	.043
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 .047	.036	.035	.056	.048	.067	.061	.061	.067	.071	.075	.072
	20 .061	.063	.061	.070	.081	.079	.090	.097	.104	.114	.013	.106
	21 .109	.112	.111	.114	.111	.112	.112	.121	.126	.129	.128	.118
	22 .037	.025	.032	.054	.052	.063	.079	.083	.068	.074	.072	.068
	23 .054	.054	.054	.065	.073	.085	.091	.079	.095	.092	.101	.100
	24 .092	.088	.095	.097	.108	.112	.144	.151	.162	.151	.156	.167
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 .190	.193	.195	.205	.220	.173	.216	.214	.216	.216	.209	.191
	27 .088	.082	.083	.083	.084	.090	.101	.101	.101	.103	.109	.106
	28 .152	.160	.163	.165	.165	.173	.166	.171	.167	.166	.186	.170
	29 .173	.168	.170	.177	.165	.170	.176	.171	.180	.189	.187	.187
	30 .220	.217	.210	.224	.226	.228	.234	.240	.242	.240	.244	.237
	31 .076	.068	.066	.062	.063	.075	.065	.065	.081	.071	.063	.068
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.123	.125	.126	.132	.134	.133	.137	.137	.141	.142	.140	.140

Note. — Wet Thermometer higher than the Dry Thermometer where the reading appears in *italics*.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
98	95	96	95	95	93	95	93	88	92	96	100	98	100	90	91
95	94	94	94	88	90	91	80	80	85	74	76	81	77	78	89
73	83	73	78	67	66	70	84	74	—	—	—	—	—	—	81
—	—	—	—	—	—	—	—	—	97	88	90	92	94	94	90
84	88	90	97	92	90	95	94	93	90	94	86	93	93	94	92
79	90	94	97	84	94	92	95	95	94	92	94	96	95	97	96
100	100	97	97	96	99	96	96	97	95	91	95	93	91	93	87
79	84	86	97	88	91	95	98	98	91	95	90	89	87	90	89
90	86	88	94	97	92	90	80	87	87	94	95	90	95	94	86
82	81	84	85	80	86	92	89	82	—	—	—	—	—	—	82
—	—	—	—	—	—	—	—	—	88	84	85	85	83	90	80
76	73	75	76	75	82	83	73	88	91	91	90	90	92	86	86
71	72	78	76	87	79	78	82	82	83	76	79	79	79	87	81
75	76	78	72	85	92	88	89	86	86	93	94	93	94	100	80
71	80	78	72	66	68	84	82	83	87	89	83	80	87	90	86
76	75	79	77	80	81	80	75	73	76	79	79	85	83	99	80
63	68	60	68	63	69	81	90	77	—	—	—	—	—	—	70
—	—	—	—	—	—	—	—	—	78	61	70	63	66	66	77
75	78	81	81	69	83	74	83	81	92	90	83	83	92	96	87
92	93	87	89	86	81	68	79	79	88	91	91	88	88	87	91
94	90	83	80	76	77	95	94	99	100	100	100	100	95	86	86
69	68	67	75	78	82	84	85	90	85	89	98	89	87	84	81
76	83	86	89	88	83	92	85	88	94	89	95	91	90	81	86
74	77	88	87	86	85	85	91	81	—	—	—	—	—	—	85
—	—	—	—	—	—	—	—	—	97	95	94	93	89	99	93
97	97	93	96	95	100	93	93	87	93	92	84	81	81	81	84
78	86	86	77	82	81	85	87	84	82	87	86	84	93	93	86
75	88	83	85	81	79	93	93	92	86	94	92	91	91	90	91
92	90	90	88	93	93	91	99	100	95	100	99	100	100	100	94
95	98	95	98	97	98	95	91	88	86	78	90	89	92	98	94
77	57	63	63	84	78	66	81	74	—	—	—	—	—	—	76
—	—	—	—	—	—	—	—	—	93	91	91	88	83	77	—
82	83	83	85	84	85	86	87	86	89	89	89	88	90	90	86
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'179	'178	'189	'199	'192	'192	'195	'193	'185	'191	'190	'206	'204	'212	'199	'176
'200	'194	'194	'194	'171	'170	'167	'149	'149	'140	'121	'123	'130	'125	'129	'177
'154	'171	'150	'155	'133	'131	'134	'149	'133	—	—	—	—	—	—	'152
—	—	—	—	—	—	—	—	—	'180	'170	'172	'164	'165	'138	—
'172	'176	'170	'162	'144	'140	'150	'147	'144	'140	'134	'119	'125	'128	'135	'149
'159	'167	'174	'173	'168	'183	'176	'175	'175	'178	'177	'183	'194	'191	'187	'173
'214	'207	'197	'196	'194	'203	'197	'195	'198	'194	'192	'195	'190	'176	'178	'198
'154	'162	'162	'178	'158	'155	'159	'163	'163	'149	'153	'145	'143	'140	'143	'158
'145	'146	'149	'160	'163	'152	'145	'129	'137	'137	'147	'148	'145	'156	'155	'142
'143	'135	'139	'140	'134	'145	'157	'153	'143	—	—	—	—	—	—	'140
—	—	—	—	—	—	—	—	—	'133	'125	'125	'121	'119	'126	—
'106	'098	'099	'094	'092	'097	'094	'076	'085	'082	'080	'078	'078	'073	'068	'096
'095	'092	'092	'085	'083	'096	'098	'102	'104	'110	'112	'109	'117	'120	'136	'095
'154	'155	'141	'147	'123	'126	'143	'140	'139	'122	'107	'114	'103	'103	'106	'135
'181	'186	'183	'177	'163	'171	'185	'189	'183	'186	'186	'165	'157	'159	'154	'166
'112	'109	'112	'105	'108	'104	'098	'090	'081	'081	'080	'075	'079	'072	'078	'110
'051	'051	'043	'046	'044	'046	'053	'056	'044	—	—	—	—	—	—	'050
—	—	—	—	—	—	—	—	—	'039	'045	'049	'043	'043	'044	—
'071	'075	'072	'067	'054	'062	'054	'056	'052	'057	'056	'054	'053	'061	'065	'058
'114	'013	'106	'108	'110	'104	'095	'107	'107	'106	'110	'110	'108	'110	'106	'093
'129	'128	'118	'107	'096	'089	'095	'081	'078	'070	'063	'056	'050	'047	'040	'095
'074	'072	'068	'068	'070	'072	'072	'070	'074	'062	'072	'065	'057	'052	'045	'062
'092	'101	'100	'098	'093	'087	'089	'081	'079	'081	'070	'074	'087	'086	'082	'081
'151	'156	'167	'160	'151	'151	'154	'160	'157	—	—	—	—	—	—	'145
—	—	—	—	—	—	—	—	—	'178	'169	'165	'163	'167	'189	—
'216	'209	'191	'185	'179	'179	'160	'159	'143	'158	'156	'124	'105	'097	'088	'174
'103	'109	'106	'097	'115	'125	'126	'134	'137	'135	'138	'139	'138	'147	'157	'113
'166	'186	'170	'172	'162	'159	'180	'178	'174	'162	'166	'164	'164	'167	'170	'168
'189	'187	'187	'190	'198	'198	'200	'210	'212	'203	'219	'209	'216	'212	'216	'192
'240	'244	'237	'240	'235	'248	'235	'208	'192	'181	'147	'143	'124	'108	'104	'205
'071	'063	'068	'063	'075	'069	'057	'066	'055	—	—	—	—	—	—	'072
—	—	—	—	—	—	—	—	—	'092	'092	'085	'084	'079	'079	—
'142	'140	'140	'139	'134	'135	'136	'134	'130	'132	'129	'126	'124	'123	'123	'132

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. FEBRUARY.	2	88	89	83	83	84	79	81	80	78	75	80	82
	3	96	98	90	83	83	83	81	84	80	78	75	69
	4	95	63	70	60	66	68	70	68	67	67	71	74
	5	71	67	78	69	60	49	49	50	52	56	69	62
	6	85	89	87	85	80	64	72	72	69	70	69	78
	7	93	96	94	78	73	79	80	79	82	80	86	90
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	67	70	77	68	69	64	58	59	59	43	62	47
	10	76	79	82	85	83	90	84	82	80	95	73	80
	11	93	96	92	89	88	86	91	89	93	89	88	93
	12	87	—	—	—	—	83	97	84	95	80	89	86
	13	83	79	80	81	71	70	70	67	68	69	84	88
	14	92	96	97	93	93	83	79	69	74	83	87	88
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	84	89	91	92	83	84	86	82	87	86	87	92
	17	94	93	96	93	93	88	88	88	83	88	87	89
	18	100	86	87	92	75	66	67	72	66	69	75	78
	19	100	80	83	76	69	65	76	62	64	72	64	25
	20	95	95	98	98	96	94	92	96	93	96	91	93
	21	86	86	89	78	74	74	80	81	80	80	73	86
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	93	88	85	89	76	72	75	77	73	77	80	81
	24	94	100	92	88	92	90	83	78	79	77	74	78
	25	68	90	90	96	88	99	80	74	75	87	81	87
	26	—	—	—	—	—	77	72	70	74	73	72	70
	27	—	—	—	100	95	80	82	83	80	82	84	78
	28	80	80	79	85	84	85	85	91	84	74	81	82
	Mar. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	87	86	87	85	81	78	78	77	76	77	78	79	
Tension of the Vapour. FEBRUARY.	2	.095	.106	.101	.108	.119	.123	.133	.134	.130	.126	.131	.136
	3	.159	.168	.167	.177	.183	.190	.194	.205	.204	.197	.187	.169
	4	.149	.102	.112	.105	.118	.129	.138	.138	.141	.140	.147	.150
	5	.145	.145	.161	.162	.144	.118	.117	.121	.123	.125	.144	.127
	6	.113	.120	.131	.137	.160	.136	.168	.166	.162	.166	.161	.168
	7	.131	.130	.128	.156	.164	.191	.192	.191	.191	.181	.194	.195
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	.068	.059	.062	.054	.055	.051	.050	.051	.055	.031	.058	.041
	10	.043	.046	.049	.061	.072	.084	.101	.099	.099	.094	.100	.099
	11	.110	.122	.102	.094	.095	.090	.095	.094	.101	.095	.090	.094
	12	.036	—	—	—	—	.070	.093	.090	.110	.099	.105	.098
	13	.113	.110	.121	.132	.126	.127	.131	.130	.136	.140	.170	.180
	14	.086	.101	.114	.122	.138	.152	.156	.141	.149	.162	.159	.158
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	.100	.105	.109	.110	.118	.124	.123	.123	.128	.123	.125	.123
	17	.099	.101	.109	.120	.133	.139	.147	.145	.140	.153	.143	.135
	18	.076	.068	.081	.089	.098	.089	.094	.104	.098	.105	.110	.109
	19	.064	.065	.067	.084	.104	.100	.120	.099	.105	.107	.101	.129
	20	.128	.129	.135	.139	.139	.137	.133	.141	.143	.163	.151	.143
	21	.123	.123	.133	.127	.128	.129	.144	.140	.130	.134	.117	.123
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	.076	.083	.083	.104	.101	.100	.105	.105	.102	.107	.104	.091
	24	.074	.074	.076	.083	.094	.092	.105	.103	.090	.087	.079	.075
	25	.032	.047	.051	.064	.067	.086	.077	.072	.075	.084	.075	.077
	26	—	—	—	—	—	.043	.044	.046	.050	.048	.044	.042
	27	—	—	—	.051	.058	.063	.073	.075	.075	.074	.075	.065
	28	.063	.064	.064	.076	.082	.089	.089	.092	.087	.080	.084	.087
	Mar. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.095	.098	.103	.107	.113	.111	.118	.117	.118	.118	.118	.119	.117

UR.

9	10	11
3	4	5
75	80	82
78	75	69
67	71	74
56	69	62
70	69	78
80	86	90
—	—	—
43	62	47
95	73	80
89	88	93
80	89	86
69	84	88
83	87	88
—	—	—
86	87	92
88	87	89
69	75	78
72	64	25
96	91	93
80	73	86
—	—	—
77	80	81
77	74	78
87	81	87
73	72	70
82	84	78
74	81	82
—	—	—
77	78	79

In.	In.	In.
'126	'134	'136
'197	'187	'169
'140	'147	'150
'125	'144	'127
'166	'161	'158
'181	'194	'195
—	—	—
'031	'058	'041
'094	'100	'099
'095	'090	'094
'099	'105	'098
'140	'170	'180
'162	'159	'158
—	—	—
'123	'125	'123
'153	'143	'135
'105	'110	'109
'107	'101	'129
'163	'151	'143
'134	'117	'123
—	—	—
'107	'104	'091
'087	'079	'075
'084	'075	'077
'048	'044	'042
'074	'075	'065
'080	'084	'087
—	—	—
'118	'119	'117

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
84	87	89	91	87	88	90	97	95	98	98	99	87
66	64	67	74	72	86	80	95	76	91	80	79	80
73	76	73	70	59	60	57	62	61	62	66	69	68
64	59	71	80	74	73	78	80	82	85	89	87	69
78	78	78	82	83	94	92	97	91	91	95	94	82
77	70	64	70	72	69	—	—	—	—	—	—	—
—	—	—	—	—	—	88	89	91	94	95	96	83
64	71	76	88	83	89	87	87	87	89	84	78	72
80	79	87	94	95	94	94	89	91	89	91	94	86
89	82	86	81	86	81	80	83	85	84	68	67	86
90	93	93	94	88	85	88	93	85	81	84	86	88
80	80	80	82	88	93	92	100	87	100	100	92	83
87	83	78	80	76	88	—	—	—	—	—	—	87
—	—	—	—	—	—	96	91	94	94	89	88	88
94	94	91	91	91	92	88	91	89	91	91	94	89
89	90	86	86	90	84	86	92	81	96	95	85	89
83	95	94	94	100	100	96	95	88	84	85	89	85
77	86	97	93	100	98	97	98	93	97	96	93	82
92	96	93	96	93	93	99	91	89	92	99	87	94
89	87	86	82	80	75	—	—	—	—	—	—	—
—	—	—	—	—	—	91	92	83	92	100	93	84
85	82	81	84	81	77	53	75	77	82	83	100	80
79	79	83	86	85	82	87	79	90	84	59	68	83
76	64	76	72	78	79	60	—	—	—	—	—	80
70	68	61	—	—	—	—	—	—	—	—	—	71
94	100	90	94	86	97	94	89	92	94	85	78	88
71	73	71	70	74	77	—	—	—	—	—	—	—
—	—	—	—	—	—	92	76	80	80	80	66	79
80	81	81	84	84	85	85	88	86	89	87	86	83
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'139	'145	'148	'160	'157	'157	'154	'164	'164	'169	'171	'165	'139
'153	'148	'146	'155	'149	'166	'148	'170	'134	'153	'133	'130	'166
'150	'158	'158	'152	'142	'147	'138	'142	'138	'134	'141	'141	'138
'131	'119	'129	'148	'130	'128	'132	'126	'129	'130	'133	'122	'133
'161	'157	'156	'161	'164	'163	'157	'151	'140	'133	'138	'133	'150
'169	'136	'104	'091	'082	'073	—	—	—	—	—	—	—
—	—	—	—	—	—	'103	'104	'106	'108	'109	'108	'139
'050	'052	'054	'059	'054	'057	'052	'052	'052	'050	'049	'044	'053
'110	'113	'128	'128	'134	'139	'136	'126	'115	'112	'109	'113	'100
'089	'080	'078	'072	'075	'070	'063	'066	'067	'047	'032	'030	'081
'095	'097	'095	'096	'090	'094	'098	'110	'106	'135	'111	'115	'096
'136	'140	'144	'142	'146	'128	'102	'096	'077	'085	'085	'086	'124
'154	'148	'129	'132	'127	'136	—	—	—	—	—	—	—
—	—	—	—	—	—	'098	'100	'106	'109	'106	'104	'129
'120	'120	'115	'110	'109	'106	'094	'095	'100	'103	'105	'107	'112
'125	'121	'113	'110	'113	'100	'102	'101	'084	'071	'060	'049	'113
'086	'081	'071	'071	'074	'073	'066	'061	'059	'053	'053	'055	'080
'121	'136	'134	'131	'140	'138	'136	'135	'124	'129	'127	'124	'113
'136	'136	'120	'135	'135	'135	'139	'130	'127	'133	'131	'127	'136
'123	'120	'112	'105	'092	'084	—	—	—	—	—	—	—
—	—	—	—	—	—	'089	'092	'086	'086	'090	'079	'113
'085	'088	'082	'080	'080	'071	'050	'068	'069	'069	'067	'079	'086
'070	'060	'059	'056	'051	'045	'050	'052	'052	'044	'029	'032	'068
'064	'049	'052	'043	'048	'047	'028	—	—	—	—	—	'060
'048	'032	'031	—	—	—	—	—	—	—	—	—	'043
'075	'076	'070	'071	'066	'072	'071	'068	'071	'072	'065	'062	'069
'073	'074	'070	'068	'070	'070	—	—	—	—	—	—	—
—	—	—	—	—	—	'090	'070	'072	'072	'072	'057	'076
'111	'108	'104	'108	'106	'104	'100	'104	'099	'099	'096	'094	'107

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MARCH.	2	72	88	92	98	94	70	83	64	86	78	68
	3	79	79	64	75	65	70	68	72	77	78	72
	4	82	70	79	81	78	68	79	71	77	79	76
	5	78	79	73	72	64	58	70	73	69	52	72
	6	90	95	88	81	78	77	71	79	78	77	78
	7	76	85	94	96	89	92	91	95	98	97	94
	8	—	—	—	—	—	—	—	—	—	—	—
	9	75	73	70	68	67	71	74	75	72	78	81
	10	86	98	73	71	68	72	68	63	67	64	59
	11	90	94	87	—	71	72	75	71	69	69	60
	12	83	84	82	77	74	69	75	81	94	94	95
	13	93	95	95	97	99	98	99	97	97	100	97
	14	98	96	96	88	82	90	80	80	84	81	72
	15	—	—	—	—	—	—	—	—	—	—	—
	16	78	77	67	87	70	72	68	70	78	86	83
	17	75	77	83	70	67	69	73	67	64	63	65
	18	83	83	80	70	67	50	64	65	66	61	68
	19	83	74	60	57	45	52	50	52	57	60	61
	20	94	95	89	56	81	84	73	64	67	71	67
	21	71	66	68	61	73	61	56	56	59	57	46
	22	—	—	—	—	—	—	—	—	—	—	—
	23	80	78	73	69	67	64	76	61	70	67	67
	24	95	94	92	89	89	91	91	92	92	87	91
	25	94	93	93	97	93	95	96	96	98	97	98
	26	96	89	91	84	84	75	81	68	65	74	81
	27	93	91	89	88	81	79	80	80	73	78	84
	28	91	88	85	82	70	71	73	73	74	80	80
	29	—	—	—	—	—	—	—	—	—	—	—
	30	90	81	79	54	58	55	55	66	69	66	75
	31	95	82	70	70	68	67	73	74	70	74	81
Hourly Means	85	85	81	78	75	73	75	73	76	76	76	78
Tension of the Vapour. MARCH.	2	In. '061	In. '077	In. '093	In. '015	In. '122	In. '096	In. '110	In. '091	In. '123	In. '112	In. '100
	3	'057	'059	'059	'097	'100	'116	'113	'121	'129	'131	'121
	4	'073	'079	'113	'150	'154	'142	'173	'163	'175	'175	'168
	5	'143	'138	'140	'149	'146	'140	'158	'167	'167	'144	'174
	6	'140	'148	'141	'141	'129	'127	'123	'132	'131	'127	'129
	7	'056	'075	'095	'127	'135	'146	'149	'050	'158	'166	'160
	8	—	—	—	—	—	—	—	—	—	—	—
	9	'146	'141	'140	'144	'151	'155	'163	'165	'152	'167	'171
	10	'136	'135	'151	'164	'161	'172	'162	'152	'163	'159	'146
	11	'131	'130	'157	—	'173	'170	'177	'172	'166	'169	'147
	12	'161	'179	'186	'190	'197	'191	'202	'227	'239	'229	'230
	13	'218	'226	'220	'237	'246	'252	'262	'261	'268	'278	'289
	14	'203	'204	'219	'205	'197	'214	'192	'193	'192	'187	'161
	15	—	—	—	—	—	—	—	—	—	—	—
	16	'128	'127	'112	'138	'113	'120	'111	'117	'137	'152	'155
	17	'108	'110	'119	'108	'107	'112	'126	'125	'130	'133	'134
	18	'103	'115	'119	'123	'140	'117	'146	'154	'159	'148	'163
	19	'168	'162	'137	'156	'130	'161	'159	'180	'176	'180	'155
	20	'142	'159	'193	'156	'205	'229	'210	'193	'217	'220	'196
	21	'133	'125	'129	'116	'140	'120	'115	'119	'130	'129	'108
	22	—	—	—	—	—	—	—	—	—	—	—
	23	'160	'163	'165	'165	'169	'168	'177	'169	'185	'171	'173
	24	'222	'222	'225	'222	'218	'218	'220	'224	'224	'218	'224
	25	'220	'229	'222	'231	'230	'240	'242	'246	'247	'246	'238
	26	'195	'186	'199	'219	'226	'216	'231	'201	'207	'208	'198
	27	'194	'200	'204	'206	'222	'212	'220	'214	'211	'202	'210
	28	'180	'176	'182	'183	'168	'184	'179	'176	'180	'182	'179
	29	—	—	—	—	—	—	—	—	—	—	—
	30	'159	'158	'158	'112	'129	'126	'152	'164	'167	'157	'170
	31	'049	'154	'146	'136	'163	'177	'183	'185	'179	'189	'201
Hourly Means	'142	'149	'155	'156	'164	'166	'171	'168	'177	'176	'173	'170

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
78	68	70	67	80	77	78	80	85	86	96	87	83	79	80	81
78	72	78	64	83	93	97	97	97	93	99	74	73	81	82	80
79	76	70	67	72	75	72	72	79	87	87	87	78	77	73	77
52	72	66	59	48	62	68	56	59	66	79	81	85	97	98	70
77	78	83	83	83	85	94	82	87	88	99	96	100	96	95	86
97	94	95	94	94	91	95	97	95	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	67	68	71	69	70	74	87
78	81	82	85	83	85	80	80	82	81	79	82	89	100	—	76
64	59	58	66	74	80	73	85	82	88	91	86	89	94	92	77
69	60	67	70	73	74	83	84	83	87	88	88	86	89	89	79
94	95	96	93	95	95	94	99	100	98	100	100	100	98	97	90
100	97	100	99	97	99	100	100	100	100	97	97	97	96	98	98
81	72	90	87	86	82	78	79	79	—	—	—	—	—	—	85
—	—	—	—	—	—	—	—	—	90	87	70	87	94	80	79
86	83	88	72	74	80	87	85	86	78	80	83	85	86	86	76
63	65	72	89	84	81	87	84	88	91	88	78	61	71	87	76
61	68	72	76	74	73	73	69	67	69	73	70	80	76	78	71
60	61	63	69	66	70	74	86	83	93	95	95	99	97	96	72
71	67	75	74	71	63	90	81	69	71	71	69	65	70	76	75
57	46	50	56	68	76	86	79	76	—	—	—	—	—	—	68
—	—	—	—	—	—	—	—	—	78	75	70	75	79	78	—
67	67	68	62	78	67	85	88	89	90	88	89	86	95	94	77
87	91	92	92	84	87	93	86	88	88	94	92	93	95	94	91
97	98	97	97	97	97	83	83	81	82	88	89	90	91	94	92
74	81	83	88	92	89	90	92	90	91	93	97	91	97	93	87
78	84	87	88	94	87	87	87	91	91	88	88	90	90	88	86
80	80	76	83	87	79	79	81	86	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	91	91	86	84	92	91	82
66	75	70	71	78	80	85	85	91	100	87	93	93	93	96	78
74	81	93	63	70	72	73	78	73	76	89	90	75	75	75	76
76	76	78	77	80	81	84	84	84	85	87	85	85	88	87	81
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*112	*100	*069	*083	*076	*072	*065	*068	*061	*060	*064	*060	*061	*055	*060	*079
*131	*121	*126	*099	*105	*097	*096	*086	*094	*110	*115	*090	*080	*080	*078	*099
*175	*168	*161	*160	*167	*168	*157	*156	*161	*155	*170	*163	*152	*156	*142	*151
*144	*174	*184	*150	*117	*133	*112	*101	*098	*097	*121	*126	*139	*153	*153	*140
*127	*129	*130	*113	*093	*085	*087	*070	*074	*065	*073	*068	*069	*068	*066	*106
*166	*160	*160	*157	*157	*156	*162	*163	*156	—	—	—	—	—	—	—
—	—	—	*169	*147	*139	*114	*150	*156	*138	*142	*145	*135	*137	*143	*136
*167	*171	*172	*140	*127	*126	*118	*127	*122	*126	*132	*127	*133	*133	*128	*141
*159	*146	*139	*160	*151	*150	*160	*162	*163	*157	*156	*153	*151	*158	*159	*158
*169	*147	*165	*227	*230	*218	*224	*242	*246	*240	*243	*247	*248	*228	*224	*220
*229	*230	*227	*251	*236	*221	*220	*218	*218	*220	*208	*201	*201	*197	*208	*235
*278	*289	*277	*167	*152	*144	*137	*136	*136	—	—	—	—	—	—	—
*187	*161	*174	—	—	—	—	—	—	*161	*160	*124	*150	*159	*138	*171
—	—	—	*126	*120	*124	*124	*117	*115	*111	*115	*115	*114	*114	*118	*125
*152	*155	*168	*161	*133	*122	*125	*115	*115	*110	*105	*094	*074	*086	*099	*116
*133	*134	*140	*154	*143	*136	*140	*136	*128	*130	*146	*138	*160	*156	*160	*141
*148	*163	*161	*164	*148	*147	*147	*151	*139	*148	*159	*159	*154	*152	*154	*156
*180	*155	*159	*185	*174	*167	*165	*193	*158	*152	*150	*145	*133	*139	*145	*176
*220	*196	*200	*124	*134	*134	*132	*118	*116	—	—	—	—	—	—	—
*129	*108	*118	—	—	—	—	—	—	*147	*151	*143	*154	*155	*153	*131
—	—	—	*156	*184	*155	*195	*204	*210	*214	*212	*214	*209	*220	*219	*185
*171	*173	*171	*224	*214	*227	*239	*225	*220	*214	*219	*211	*215	*220	*217	*221
*224	*218	*224	*232	*230	*233	*198	*194	*189	*186	*192	*192	*188	*189	*193	*218
*246	*238	*231	*203	*202	*195	*194	*196	*194	*195	*197	*202	*198	*201	*196	*202
*208	*198	*192	*204	*210	*200	*196	*191	*200	*197	*186	*183	*178	*178	*176	*200
*202	*210	*198	*171	*174	*160	*160	*163	*168	—	—	—	—	—	—	—
*182	*179	*164	—	—	—	—	—	—	*147	*151	*148	*143	*157	*155	*168
—	—	—	*157	*160	*158	*131	*141	*146	*181	*158	*165	*165	*159	*159	*154
*157	*170	*161	*160	*149	*148	*140	*140	*136	*126	*133	*132	*120	*123	*123	*147
*189	*201	*130	—	—	—	—	—	—	—	—	—	—	—	—	—
*176	*173	*170	*165	*159	*154	*153	*153	*151	*152	*155	*150	*149	*152	*151	*159

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. APRIL.	1	81	98	70	56	60	53	58	64	61	53	49	59
	2	81	73	64	59	59	66	57	54	51	49	52	52
	3	74	69	49	50	55	56	60	52	42	38	34	41
	4	72	64	72	69	63	67	64	66	61	53	54	48
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	81	82	79	79	75	72	71	69	74	73	76	86
	7	85	82	71	70	63	66	65	66	76	68	75	80
	8	63	56	62	53	53	53	47	40	35	36	41	35
	9	88	75	54	63	68	50	40	46	45	49	53	58
	10*	—	—	—	—	—	—	—	—	—	—	—	—
	11	95	96	95	97	86	77	61	51	47	54	62	59
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	90	88	86	82	63	69	67	62	54	45	50	53
	14	95	85	66	70	67	60	62	66	70	50	57	80
	15	78	78	78	69	79	78	68	63	85	58	33	56
	16	90	83	53	72	62	62	65	54	53	59	67	65
	17	83	73	73	62	67	59	60	60	57	57	57	52
	18	55	64	81	82	87	79	85	74	78	69	69	66
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	89	80	81	71	67	62	62	57	50	50	50	53
	21	69	66	58	53	55	51	46	50	28	35	74	60
	22	88	84	83	84	82	78	76	77	79	77	75	80
	23	86	89	99	94	86	80	75	75	70	72	66	75
	24	83	85	85	82	80	84	80	89	87	93	96	96
	25	68	67	69	67	67	67	62	54	57	55	54	56
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	56	50	38	43	44	44	46	47	51	49	47	47
	28	56	42	46	43	44	40	42	45	51	47	50	41
	29	88	90	91	88	85	86	85	88	91	93	94	96
	30	94	94	88	88	93	91	88	85	91	86	89	91
Hourly Means	80	77	72	70	68	66	64	62	62	59	61	63	
Tension of the Vapour. APRIL.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	*131	*165	*144	*154	*149	*137	*151	*164	*162	*140	*133	*150
	2	*134	*140	*146	*140	*140	*166	*148	*139	*132	*130	*131	*130
	3	*130	*143	*121	*127	*145	*153	*171	*145	*131	*112	*104	*115
	4	*146	*150	*176	*183	*178	*196	*194	*198	*200	*183	*189	*168
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	*214	*211	*209	*222	*250	*262	*261	*266	*273	*266	*279	*257
	7	*243	*249	*243	*264	*266	*282	*267	*277	*302	*284	*326	*316
	8	*123	*113	*132	*114	*121	*131	*113	*102	*091	*094	*110	*091
	9	*119	*144	*120	*165	*182	*146	*154	*151	*153	*162	*148	*141
	10*	—	—	—	—	—	—	—	—	—	—	—	—
	11	*224	*225	*224	*339	*329	*325	*266	*204	*160	*162	*175	*152
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	*134	*134	*132	*134	*116	*134	*138	*153	*122	*106	*118	*117
	14	*146	*168	*153	*181	*185	*174	*170	*182	*189	*130	*162	*204
	15	*133	*132	*132	*123	*158	*164	*156	*149	*218	*146	*140	*148
	16	*136	*161	*124	*180	*172	*182	*162	*164	*180	*172	*158	*158
	17	*160	*191	*216	*228	*257	*241	*249	*256	*239	*249	*254	*233
	18	*243	*250	*304	*331	*301	*295	*300	*316	*314	*312	*308	*307
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	*155	*192	*230	*223	*241	*252	*272	*279	*269	*270	*264	*258
	21	*200	*264	*275	*295	*325	*337	*334	*351	*269	*291	*393	*332
	22	*240	*243	*242	*250	*249	*242	*254	*276	*283	*375	*281	*267
	23	*297	*328	*362	*302	*307	*303	*303	*314	*302	*308	*278	*323
	24	*302	*320	*320	*314	*318	*341	*336	*395	*361	*398	*416	*425
	25	*190	*190	*194	*172	*172	*181	*165	*156	*177	*162	*155	*162
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	*152	*174	*150	*196	*205	*203	*208	*204	*219	*215	*224	*222
	28	*176	*170	*185	*174	*175	*174	*182	*198	*232	*236	*254	*221
	29	*273	*275	*277	*291	*296	*295	*305	*299	*302	*308	*305	*324
	30	*318	*329	*326	*311	*318	*348	*364	*379	*412	*360	*378	*374
Hourly Means	*189	*202	*205	*217	*222	*226	*226	*229	*227	*223	*228	*225	

* Good Friday.

R.

9	10	11
3	4	5
53	49	59
49	52	52
38	34	41
53	54	48
—	—	—
73	76	86
68	75	80
36	41	35
49	53	58
—	—	—
54	62	59
—	—	—
45	50	53
50	57	80
58	33	56
59	67	65
57	57	52
69	69	66
—	—	—
50	50	53
35	74	60
77	75	80
72	66	75
93	96	96
55	54	56
—	—	—
49	47	47
47	50	41
93	94	96
86	89	91
—	—	—
59	61	63
In.	In.	In.
'140	'133	'150
'130	'131	'130
'112	'104	'115
'183	'189	'168
—	—	—
'266	'279	'297
'284	'326	'316
'094	'110	'091
'162	'148	'141
—	—	—
'162	'175	'152
—	—	—
'106	'118	'117
'130	'162	'204
'146	'140	'148
'180	'172	'158
'249	'254	'233
'312	'308	'307
—	—	—
'270	'264	'258
'291	'393	'332
'375	'281	'267
'308	'278	'323
'398	'416	'425
'162	'155	'162
—	—	—
'215	'224	'222
'236	'254	'221
'308	'305	'324
'360	'378	'374
—	—	—
'223	'228	'225

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	24	
6	7	8	9	10	11	12	13	14	15	16	17	18	
67	69	74	67	76	70	70	71	80	85	89	76	69	
57	60	77	87	81	70	70	77	73	76	78	77	67	
56	59	59	73	70	70	70	67	69	78	87	85	61	
57	55	50	62	66	76	—	—	—	—	—	—	—	
—	—	—	—	—	—	95	94	90	91	84	82	69	
81	81	83	89	88	95	87	89	89	90	89	87	82	
88	88	86	89	77	72	73	68	71	69	62	69	74	
36	49	52	63	57	55	78	78	83	86	85	89	58	
60	62	73	61	67	71	—	—	—	—	—	—	—	
—	—	—	—	—	—	72	82	81	84	92	90	66	
59	61	64	64	69	70	—	—	—	—	—	—	—	
—	—	—	—	—	—	85	86	96	90	87	92	75	
70	75	70	82	80	80	77	83	85	89	89	90	74	
90	95	98	99	96	94	88	62	68	76	76	70	77	
68	78	86	87	92	92	93	—	92	95	95	95	78	
68	76	73	75	75	81	75	79	—	78	81	89	71	
54	68	72	82	84	90	90	93	85	93	79	63	71	
94	57	70	74	84	78	—	—	—	—	—	—	—	
—	—	—	—	—	—	87	87	92	86	88	93	78	
57	56	59	60	66	74	66	55	73	70	67	68	64	
79	80	86	91	94	94	93	94	95	90	91	89	72	
82	86	87	89	93	93	90	91	86	88	94	86	85	
69	67	72	68	65	63	53	55	57	72	72	84	74	
97	99	95	96	98	95	92	95	95	96	85	76	90	
56	60	66	68	56	56	—	—	—	—	—	—	—	
—	—	—	—	—	—	64	60	57	57	63	61	61	
51	59	60	66	61	67	65	64	75	73	80	76	57	
40	41	58	62	67	86	90	94	95	91	90	93	61	
95	95	91	94	93	94	92	95	95	94	94	94	92	
88	90	93	96	95	94	95	95	96	93	91	98	92	
69	71	74	78	78	79	80	80	82	84	83	83	73	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
'160	'131	'129	'112	'121	'115	'114	'114	'121	'123	'126	'116	'136	
'130	'127	'129	'142	'133	'115	'118	'127	'121	'126	'127	'122	'133	
'156	'122	'118	'132	'136	'143	'146	'133	'128	'131	'156	'153	'135	
'174	'162	'147	'169	'175	'189	—	—	—	—	—	—	—	
—	—	—	—	—	—	'303	'295	'283	'286	'155	'125	'193	
'280	'277	'274	'276	'278	'282	'261	'263	'260	'252	'244	'233	'258	
'330	'321	'309	'288	'252	'214	'218	'180	'171	'150	'134	'139	'251	
'095	'110	'108	'119	'101	'069	'124	'119	'120	'122	'121	'120	'112	
'189	'136	'160	'132	'136	'145	—	—	—	—	—	—	—	
—	—	—	—	—	—	'194	'113	'209	'213	'225	'214	'158	
'139	'140	'142	'138	'143	'143	—	—	—	—	—	—	—	
—	—	—	—	—	—	'126	'127	'135	'133	'128	'136	'184	
'146	'145	'115	'126	'121	'126	'123	'130	'129	'139	'139	'140	'130	
'219	'112	'209	'212	'200	'197	'175	'128	'122	'134	'130	'124	'167	
'162	'159	'152	'139	'140	'140	'138	—	'136	'134	'134	'130	'146	
'164	'185	'177	'187	'180	'195	'180	'189	—	'182	'171	'170	'171	
'237	'260	'248	'241	'231	'238	'228	'222	'225	'236	'243	'250	'235	
'312	'226	'249	'259	'248	'208	—	—	—	—	—	—	—	
—	—	—	—	—	—	'159	'162	'162	'151	'147	'148	'251	
'253	'248	'251	'249	'247	'230	'213	'198	'219	'207	'205	'209	'235	
'559	'343	'336	'340	'348	'346	'334	'333	'338	'268	'248	'240	'312	
'258	'251	'243	'251	'262	'268	'277	'283	'266	'270	'304	'280	'267	
'293	'278	'284	'273	'272	'270	'234	'232	'237	'265	'260	'310	'289	
'408	'320	'294	'298	'320	'329	'320	'339	'339	'335	'294	'223	'336	
'162	'169	'181	'183	'165	'165	—	—	—	—	—	—	—	
—	—	—	—	—	—	'156	'154	'143	'144	'151	'145	'166	
'225	'207	'179	'186	'172	'182	'178	'174	'182	'174	'176	'167	'191	
'201	'194	'211	'214	'221	'252	'263	'286	'309	'309	'304	'300	'227	
'323	'323	'306	'305	'300	'299	'292	'303	'300	'304	'304	'309	'301	
'362	'319	'343	'344	'348	'340	'342	'341	'351	'342	'350	'358	'349	
—	—	—	—	—	—	—	—	—	—	—	—	—	
'227	'212	'212	'213	'210	'209	'209	'206	'209	'205	'199	'194	'214	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MAY.	1	86	85	84	85	77	75	80	82	75	76	85
	2	80	79	73	68	76	71	75	82	80	83	83
	3	—	—	—	—	—	—	—	—	—	—	—
	4	83	72	78	67	63	55	54	52	54	55	54
	5	87	72	66	76	77	75	70	65	74	70	72
	6	80	63	55	56	60	60	57	58	49	51	49
	7	52	46	43	45	56	60	65	67	73	70	76
	8	89	85	82	75	68	67	67	78	69	67	71
	9	96	95	94	95	93	96	95	96	96	96	97
	10	—	—	—	—	—	—	—	—	—	—	—
	11	66	52	52	60	60	60	56	46	49	55	45
	12	63	59	52	55	48	47	66	64	61	58	63
	13	89	88	90	84	83	80	72	67	59	59	56
	14	97	93	90	83	79	74	73	74	67	69	64
	15	97	94	92	90	87	82	78	88	89	92	84
	16	74	89	85	81	78	66	81	79	77	77	75
	17	—	—	—	—	—	—	—	—	—	—	—
	18	86	84	71	65	61	50	50	35	42	44	41
	19	74	65	59	46	53	62	62	63	58	59	64
	20	74	63	54	50	42	36	35	32	40	31	30
	21	61	56	65	67	66	66	71	66	68	59	63
	22	75	69	70	64	64	60	53	56	49	47	47
	23	92	89	89	96	90	87	89	47	73	71	74
	24	—	—	—	—	—	—	—	—	—	—	—
	25	95	87	90	88	89	87	88	88	86	90	92
	26	96	92	86	85	83	82	81	81	83	80	81
	27	92	80	73	67	66	63	61	57	54	56	53
	28	92	83	80	86	85	80	84	80	79	77	80
	29	86	80	68	69	74	71	73	72	69	72	71
	30	92	94	93	92	89	87	87	84	84	78	76
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	83	77	74	73	72	69	70	68	68	67	67	69
Tension of the Vapour. MAY.	1	In. '346	In. '348	In. '347	In. '350	In. '340	In. '336	In. '348	In. '356	In. '338	In. '329	In. '347
	2	'313	'325	'331	'335	'340	'388	'366	'395	'392	'392	'392
	3	—	—	—	—	—	—	—	—	—	—	—
	4	'222	'285	'363	'339	'350	'331	'329	'308	'322	'327	'345
	5	'263	'276	'213	'377	'332	'312	'330	'356	'415	'417	'410
	6	'336	'272	'245	'246	'241	'236	'217	'224	'199	'222	'216
	7	'180	'183	'180	'192	'232	'265	'301	'314	'316	'312	'341
	8	'312	'362	'371	'374	'354	'364	'361	'393	'372	'338	'345
	9	'404	'404	'413	'404	'400	'402	'404	'419	'419	'419	'430
	10	—	—	—	—	—	—	—	—	—	—	—
	11	'135	'112	'132	'133	'163	'148	'148	'124	'142	'168	'144
	12	'180	'188	'187	'114	'204	'218	'321	'308	'316	'302	'327
	13	'245	'237	'290	'346	'388	'412	'407	'390	'386	'389	'382
	14	'398	'438	'457	'485	'485	'436	'438	'453	'437	'401	'446
	15	'353	'343	'328	'343	'358	'348	'366	'417	'412	'454	'462
	16	'249	'305	'353	'391	'390	'391	'419	'421	'405	'397	'408
	17	—	—	—	—	—	—	—	—	—	—	—
	18	'353	'343	'284	'274	'256	'221	'219	'145	'168	'175	'162
	19	'176	'176	'172	'151	'180	'228	'224	'236	'237	'251	'274
	20	'208	'215	'214	'229	'254	'212	'209	'194	'250	'193	'189
	21	'167	'162	'195	'204	'209	'211	'229	'221	'237	'220	'226
	22	'200	'222	'238	'261	'274	'283	'238	'249	'230	'208	'210
	23	'329	'366	'397	'442	'477	'460	'540	'519	'519	'470	'472
	24	—	—	—	—	—	—	—	—	—	—	—
	25	'495	'529	'584	'611	'620	'594	'653	'662	'676	'647	'618
	26	'556	'562	'614	'638	'618	'614	'652	'709	'674	'644	'613
	27	'562	'610	'592	'551	'535	'541	'522	'493	'482	'484	'485
	28	'454	'473	'485	'529	'592	'535	'579	'607	'572	'522	'518
	29	'395	'419	'435	'476	'536	'487	'524	'514	'504	'500	'482
	30	'462	'450	'486	'518	'625	'643	'659	'655	'630	'605	'585
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	'319	'331	'342	'358	'376	'370	'385	'389	'387	'376	'378	'365

J.R.

9	10	11
3	4	5
76	85	94
83	83	79
—	—	—
55	54	84
70	72	80
51	49	50
70	76	76
67	71	76
96	97	94
—	—	—
55	45	44
58	63	54
59	56	56
69	64	62
92	84	86
77	75	74
—	—	—
44	41	38
59	64	65
31	30	30
59	63	61
47	47	67
71	74	72
—	—	—
90	92	92
80	80	81
56	53	57
77	80	76
72	71	77
78	76	76
—	—	—
67	67	69
In.	In.	In.
*329	*347	*375
*392	*392	*373
—	—	—
*327	*345	*376
*417	*410	*398
*222	*216	*224
*312	*341	*341
*338	*345	*353
*419	*430	*428
—	—	—
*168	*144	*140
*302	*327	*310
*389	*382	*389
*401	*446	*402
*454	*462	*430
*397	*408	*379
—	—	—
*175	*162	*144
*251	*274	*265
*193	*189	*183
*220	*226	*215
*208	*210	*269
*470	*472	*450
—	—	—
*647	*618	*639
*644	*613	*616
*484	*485	*538
*522	*518	*506
*500	*482	*449
*605	*585	*586
—	—	—
*376	*378	*365

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
91	91	94	90	93	93	96	94	94	94	91	86	87
83	85	90	90	90	89	—	—	—	—	—	—	81
—	—	—	—	—	—	76	83	86	87	82	83	70
52	61	72	75	73	79	83	80	83	83	84	87	80
81	80	86	90	89	88	91	83	85	85	84	85	61
52	62	60	59	70	68	68	70	69	68	73	66	73
80	82	85	87	86	84	83	83	89	91	93	91	82
79	82	84	83	88	90	91	90	92	93	94	96	87
94	96	94	94	96	96	—	—	—	—	—	—	87
—	—	—	—	—	—	54	58	58	65	65	63	58
45	54	60	67	68	61	63	67	67	64	62	70	70
71	68	82	87	80	81	82	86	88	90	88	87	77
57	65	73	75	68	77	85	89	94	97	95	96	79
71	69	77	77	72	76	78	83	87	95	96	96	85
66	73	76	79	82	84	89	88	86	88	89	84	82
77	78	85	85	90	91	—	—	—	—	—	—	58
—	—	—	—	—	—	78	79	91	92	89	86	67
39	42	50	55	57	59	59	72	72	74	76	78	53
69	49	62	83	87	88	81	77	70	71	72	70	72
37	45	54	62	56	68	60	61	73	70	84	80	67
63	69	74	82	83	86	86	87	87	85	85	83	72
66	69	58	57	59	56	77	78	90	88	94	95	67
74	74	82	85	85	85	—	—	—	—	—	—	84
—	—	—	—	—	—	92	95	96	97	99	92	92
88	90	92	97	98	98	98	95	95	95	95	95	88
80	87	96	90	93	94	95	95	94	95	95	96	74
69	58	71	84	44	91	95	91	92	91	90	91	82
75	65	65	78	90	83	81	88	93	91	88	91	78
76	79	81	77	77	76	77	86	88	91	91	94	87
76	78	80	89	86	89	—	—	—	—	—	—	87
—	—	—	—	—	—	92	92	93	91	92	92	—
70	71	76	80	81	82	81	83	85	86	87	86	76
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*367	*362	*366	*367	*391	*362	*361	*354	*354	*355	*350	*332	*353
*401	*362	*326	*302	*291	*304	—	—	—	—	—	—	*320
—	—	—	—	—	—	*222	*228	*223	*220	*209	*208	*280
*302	*293	*296	*274	*257	*252	*255	*229	*225	*217	*216	*217	*340
*307	*368	*359	*338	*336	*337	*349	*308	*311	*311	*303	*344	*219
*214	*227	*199	*194	*214	*195	*195	*207	*199	*181	*190	*167	*286
*349	*340	*334	*312	*294	*275	*283	*288	*298	*313	*306	*318	*372
*377	*374	*365	*363	*390	*393	*397	*394	*392	*394	*383	*397	—
*437	*448	*454	*457	*462	*464	—	—	—	—	—	—	*342
—	—	—	—	—	—	*149	*146	*134	*139	*133	*131	*152
*146	*165	*153	*175	*169	*156	*159	*172	*172	*169	*163	*191	*241
*326	*279	*257	*251	*225	*210	*209	*195	*199	*209	*226	*233	*378
*396	*351	*355	*340	*374	*428	*427	*460	*450	*439	*405	*396	*428
*386	*379	*404	*404	*380	*384	*467	*477	*491	*433	*432	*364	*333
*303	*304	*297	*283	*286	*287	*276	*267	*263	*262	*260	*250	—
*384	*363	*339	*309	*308	*312	—	—	—	—	—	—	*364
—	—	—	—	—	—	*345	*345	*389	*395	*375	*359	*189
*141	*132	*144	*150	*146	*148	*147	*161	*152	*158	*155	*160	*207
*264	*179	*203	*204	*204	*205	*197	*195	*184	*186	*191	*180	*205
*206	*211	*222	*217	*206	*218	*187	*187	*197	*183	*179	*181	*198
*220	*226	*195	*194	*194	*193	*188	*187	*140	*169	*168	*167	*250
*264	*266	*224	*216	*217	*216	*272	*256	*287	*285	*305	*309	—
*426	*401	*408	*403	*400	*400	—	—	—	—	—	—	*420
—	—	—	—	—	—	*334	*336	*327	*367	*422	*424	*375
*651	*636	*583	*562	*550	*532	*511	*488	*489	*506	*468	*506	*566
*557	*559	*540	*495	*490	*493	*491	*478	*484	*500	*491	*502	*485
*549	*490	*465	*459	*460	*420	*426	*400	*389	*394	*384	*398	*469
*555	*475	*418	*414	*437	*405	*391	*390	*369	*331	*341	*347	*457
*446	*454	*429	*402	*403	*403	*418	*455	*443	*459	*470	*474	—
*586	*512	*480	*513	*508	*508	—	—	—	—	—	—	*521
—	—	—	—	—	—	*423	*408	*402	*415	*409	*437	—
*371	*351	*339	*331	*330	*327	*310	*309	*308	*307	*305	*307	*345

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Leitungen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. JUNE.	1	94	87	83	86	97	92	85	85	87	84	78	80
	2	93	92	93	89	92	92	87	87	84	82	75	77
	3	94	86	78	76	90	82	73	74	62	71	74	71
	4	96	92	93	93	88	91	83	80	84	86	82	91
	5	81	81	90	92	91	90	88	82	81	86	87	87
	6	82	77	78	66	67	62	58	60	60	69	59	41
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	87	61	70	64	60	61	62	64	61	60	61	64
	9	70	69	63	74	62	54	58	61	59	62	63	54
	10	81	75	70	56	66	73	73	72	61	67	65	69
	11	76	74	73	71	70	76	80	82	81	75	80	87
	12	61	57	53	53	62	64	64	63	62	59	59	56
	13	79	74	75	70	73	75	70	66	71	73	88	65
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	90	83	71	68	74	73	77	73	72	63	70	50
	16	77	73	67	61	65	65	72	71	70	69	75	72
	17	83	77	71	72	69	66	70	71	70	68	73	75
	18	91	94	88	85	84	79	81	80	93	87	90	84
	19	94	93	91	94	88	87	78	64	59	48	43	49
	20	78	79	77	78	79	77	75	68	68	71	67	68
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	75	71	71	63	56	44	50	40	35	40	45	47
	23	62	60	58	52	48	43	34	42	42	40	40	35
	24	61	69	55	49	44	38	31	34	30	46	26	35
	25	49	45	49	46	36	37	35	36	35	54	54	37
	26	66	66	67	65	58	57	57	56	54	49	67	60
	27	86	84	81	76	71	70	66	71	67	69	72	71
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	94	94	93	87	82	78	77	70	74	76	69	69
	30	84	77	73	72	74	67	65	64	67	59	59	58
Hourly Means	80	77	74	72	71	69	67	66	66	66	66	64	
Tension of the Vapour. JUNE.	1	In. .474	In. .514	In. .518	In. .509	In. .523	In. .556	In. .590	In. .597	In. .602	In. .579	In. .600	In. .626
	2	.538	.523	.553	.592	.571	.574	.484	.529	.521	.509	.469	.480
	3	.415	.438	.436	.474	.505	.507	.430	.430	.415	.485	.494	.522
	4	.492	.539	.532	.535	.535	.527	.546	.562	.522	.450	.442	.490
	5	.355	.348	.371	.381	.377	.368	.375	.377	.381	.452	.413	.418
	6	.240	.266	.287	.277	.287	.276	.272	.265	.283	.279	.277	.202
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	.285	.264	.350	.349	.346	.378	.381	.393	.376	.375	.403	.412
	9	.257	.301	.344	.466	.418	.369	.378	.395	.408	.433	.438	.375
	10	.323	.354	.416	.353	.418	.512	.518	.547	.520	.562	.543	.521
	11	.359	.414	.436	.481	.497	.496	.480	.451	.463	.475	.496	.545
	12	.238	.236	.238	.261	.331	.319	.315	.315	.318	.310	.321	.311
	13	.380	.404	.409	.427	.442	.442	.418	.393	.433	.424	.379	.356
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	.464	.473	.455	.515	.608	.590	.614	.606	.610	.520	.585	.455
	16	.393	.409	.408	.426	.449	.427	.484	.485	.482	.481	.516	.510
	17	.367	.419	.454	.512	.513	.511	.570	.590	.590	.606	.621	.588
	18	.494	.525	.520	.603	.677	.659	.693	.737	.716	.625	.785	.731
	19	.617	.636	.618	.645	.657	.730	.709	.617	.571	.475	.425	.483
	20	.389	.392	.388	.397	.408	.388	.377	.360	.359	.353	.335	.336
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	.310	.306	.335	.324	.328	.282	.302	.270	.235	.266	.48	.290
	23	.293	.326	.333	.336	.354	.340	.279	.341	.354	.332	.6	.284
	24	.316	.409	.343	.337	.342	.325	.293	.320	.287	.415	.254	.331
	25	.305	.307	.372	.396	.347	.371	.366	.405	.551	.534	.529	.535
	26	.387	.393	.435	.446	.477	.487	.482	.476	.504	.486	.575	.533
	27	.485	.553	.519	.504	.489	.522	.521	.524	.466	.469	.507	.489
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	.570	.563	.582	.585	.631	.623	.624	.609	.626	.649	.623	.612
	30	.575	.589	.599	.615	.645	.614	.632	.595	.629	.557	.565	.579
Hourly Means	.397	.419	.433	.452	.468	.469	.467	.469	.470	.465	.470	.462	

R.

9	10	11
3	4	5
84	78	80
82	75	77
71	74	71
86	82	91
86	87	87
69	59	41
—	—	—
60	61	64
62	63	54
67	65	69
75	80	87
59	59	56
73	88	65
—	—	—
63	70	50
69	75	72
68	73	73
87	90	84
48	43	49
71	67	68
—	—	—
40	45	47
40	40	35
46	26	35
54	54	37
49	67	60
69	72	71
—	—	—
76	69	69
59	59	58
66	66	64

In.	In.	In.
'579	'600	'626
'509	'469	'480
'485	'494	'522
'450	'442	'490
'452	'413	'418
'279	'277	'202
—	—	—
'375	'403	'412
'433	'438	'373
'562	'543	'521
'475	'496	'543
'310	'321	'314
'424	'379	'356
—	—	—
'520	'585	'455
'481	'516	'510
'606	'621	'588
'625	'785	'731
'475	'425	'483
'353	'335	'336
—	—	—
'266	'288	'290
'332	'36	'284
'415	'254	'331
'534	'529	'537
'486	'575	'533
'469	'507	'489
—	—	—
'649	'623	'612
'557	'565	'579
—	—	—
'465	'470	'462

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
85	89	91	87	90	93	91	92	92	95	91	94	89
78	82	62	73	84	88	91	91	94	91	93	92	86
70	76	81	87	94	93	93	93	93	94	94	96	83
91	92	96	96	99	97	94	84	87	85	82	79	89
88	88	79	86	75	74	71	72	80	82	83	82	83
47	57	77	80	86	89	—	—	—	—	—	—	71
—	—	—	—	—	—	84	84	72	75	87	90	72
72	77	85	84	80	77	73	76	82	81	79	79	71
64	75	71	83	84	78	82	83	83	88	82	90	75
69	72	76	85	80	82	84	91	82	82	81	79	75
73	77	88	89	88	89	60	53	57	62	64	66	75
61	69	69	73	71	74	72	67	68	79	82	85	66
67	73	75	83	86	81	—	—	—	—	—	—	79
—	—	—	—	—	92	92	92	92	93	92	92	70
49	52	55	63	64	67	68	76	74	77	84	84	77
79	77	82	86	86	83	83	81	88	88	88	88	80
78	80	78	88	91	91	91	89	91	90	89	94	90
85	90	89	89	90	96	97	97	96	95	97	96	90
58	75	78	87	83	81	85	87	89	86	79	81	77
71	72	69	77	79	81	—	—	—	—	—	—	76
—	—	—	—	—	84	86	84	78	78	78	72	62
64	67	74	71	79	84	85	78	69	64	63	60	49
40	45	41	43	44	40	54	57	58	66	66	61	47
40	55	53	48	54	63	48	49	48	47	47	47	52
71	50	53	56	55	54	54	55	56	55	55	74	69
66	67	71	74	78	76	83	77	75	81	85	89	80
68	74	77	84	86	89	—	—	—	—	—	—	82
—	—	—	—	—	—	91	92	94	95	93	95	73
68	78	83	85	87	86	85	79	85	88	92	90	87
64	63	78	73	73	75	82	85	86	87	90	87	74
68	72	74	78	79	80	80	79	80	81	81	82	74
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'570	'546	'534	'499	'515	'516	'498	'483	'477	'491	'463	'490	'532
'437	'398	'349	'368	'368	'353	'349	'338	'356	'328	'320	'324	'443
'490	'451	'441	'473	'483	'473	'464	'464	'464	'450	'450	'470	'464
'490	'501	'465	'465	'485	'476	'460	'415	'400	'385	'368	'353	'476
'419	'395	'326	'289	'268	'257	'241	'238	'239	'235	'230	'223	'332
'224	'242	'254	'240	'235	'230	—	—	—	—	—	—	'261
—	—	—	—	—	—	'316	'310	'248	'251	'253	'245	'321
'421	'389	'339	'300	'278	'258	'242	'237	'240	'229	'224	'232	'344
'427	'409	'309	'320	'296	'281	'282	'268	'268	'270	'255	'279	'431
'475	'465	'420	'423	'402	'387	'381	'380	'354	'360	'337	'340	'391
'459	'433	'410	'381	'342	'372	'258	'216	'224	'228	'231	'229	'302
'322	'324	'291	'279	'273	'280	'278	'312	'324	'346	'343	'350	'400
'362	'376	'372	'367	'359	'328	—	—	—	—	—	—	'476
—	—	—	—	—	—	'409	'422	'420	'424	'422	'441	'424
'434	'405	'392	'417	'392	'398	'395	'429	'419	'429	'433	'390	'505
'530	'447	'435	'430	'402	'387	'387	'360	'361	'323	'317	'321	'623
'601	'543	'499	'476	'465	'453	'468	'456	'438	'452	'456	'545	'536
'763	'751	'609	'600	'589	'591	'575	'553	'529	'535	'549	'545	'340
'513	'521	'532	'537	'514	'489	'467	'447	'443	'425	'399	'394	'280
'341	'330	'319	'325	'328	'320	—	—	—	—	—	—	'309
—	—	—	—	—	—	'294	'304	'294	'273	'273	'280	'306
'357	'361	'362	'351	'366	'360	'330	'320	'290	'269	'266	'256	'323
'330	'330	'267	'261	'254	'217	'287	'292	'293	'307	'304	'293	'399
'353	'440	'353	'308	'320	'343	'288	'292	'277	'272	'264	'272	'481
'592	'410	'393	'393	'355	'344	'334	'332	'330	'330	'330	'414	'510
'511	'706	'508	'515	'512	'503	'512	'480	'453	'468	'461	'440	'575
'473	'470	'473	'498	'495	'506	—	—	—	—	—	—	'567
—	—	—	—	—	—	'540	'541	'539	'528	'546	'565	'426
'585	'605	'574	'547	'529	'530	'532	'526	'533	'512	'518	'523	
'619	'554	'600	'549	'524	'525	'509	'503	'503	'489	'512	'542	
'465	'446	'416	'408	'398	'391	'389	'382	'374	'370	'366	'373	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottenge Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JULY.	1	81	74	75	68	71	66	72	74	71	74	85
	2	82	76	71	72	70	59	69	64	69	73	67
	3	93	83	74	67	65	54	57	54	62	54	58
	4	82	80	80	76	75	71	72	73	66	71	67
	5	—	—	—	—	—	—	—	—	—	—	—
	6	85	83	67	74	88	58	57	39	38	39	40
	7	84	75	63	62	47	42	38	56	61	30	29
	8	67	76	92	90	88	78	74	70	64	63	67
	9	87	75	64	68	68	83	80	90	80	80	69
	10	81	74	73	71	57	51	56	78	67	63	57
	11	88	87	87	81	66	68	57	57	72	81	75
	12	—	—	—	—	—	—	—	—	—	—	—
	13	91	94	81	76	63	56	54	74	59	61	61
	14	87	94	92	61	67	61	56	59	61	65	58
	15	89	76	73	69	63	62	60	63	75	69	79
	16	86	87	82	90	61	63	57	51	46	50	46
	17	87	73	66	59	58	60	55	57	50	52	57
	18	89	80	76	72	69	67	63	57	58	55	56
	19	—	—	—	—	—	—	—	—	—	—	—
	20	80	81	81	77	70	68	64	60	65	61	60
	21	91	85	80	66	67	63	61	61	60	63	61
	22	91	89	89	81	82	78	70	65	67	68	70
	23	91	84	71	59	61	69	65	64	52	54	49
	24	93	90	94	94	92	91	95	91	87	79	88
	25	78	73	69	58	53	49	45	48	59	60	58
	26	—	—	—	—	—	—	—	—	—	—	—
	27	89	83	77	73	70	68	55	51	48	49	46
	28	82	83	77	70	67	65	68	69	70	67	72
	29	95	87	81	80	76	77	72	71	77	71	68
	30	94	92	87	85	79	76	81	82	63	59	64
	31	83	79	77	70	60	57	56	48	48	46	56
Hourly Means	86	82	78	73	69	65	63	64	63	61	60	61
Tension of the Vapour. JULY.	1	In. .559	In. .582	In. .636	In. .595	In. .630	In. .604	In. .673	In. .639	In. .639	In. .603	In. .639
	2	.495	.491	.476	.486	.503	.461	.591	.567	.582	.601	.561
	3	.501	.518	.524	.510	.500	.427	.472	.442	.510	.446	.427
	4	.390	.511	.589	.585	.626	.639	.668	.631	.625	.603	.580
	5	—	—	—	—	—	—	—	—	—	—	—
	6	.488	.514	.470	.592	.543	.528	.535	.386	.395	.390	.403
	7	.433	.433	.388	.402	.430	.327	.306	.450	.485	.269	.256
	8	.367	.431	.503	.536	.580	.545	.574	.590	.589	.607	.603
	9	.486	.528	.567	.652	.625	.665	.562	.583	.626	.653	.653
	10	.726	.748	.849	.848	.775	.738	.880	.708	.833	.872	.809
	11	.621	.751	.775	.781	.773	.776	.695	.697	.730	.693	.753
	12	—	—	—	—	—	—	—	—	—	—	—
	13	.422	.472	.457	.504	.446	.423	.442	.638	.495	.551	.508
	14	.352	.410	.442	.333	.364	.341	.336	.345	.366	.378	.307
	15	.317	.315	.321	.332	.295	.310	.323	.316	.416	.365	.380
	16	.352	.438	.438	.517	.369	.360	.350	.323	.319	.334	.333
	17	.305	.355	.410	.385	.411	.438	.405	.448	.395	.369	.382
	18	.391	.456	.485	.496	.495	.510	.487	.465	.477	.453	.467
	19	—	—	—	—	—	—	—	—	—	—	—
	20	.504	.567	.569	.599	.600	.584	.556	.545	.597	.579	.556
	21	.553	.587	.608	.559	.580	.558	.569	.544	.527	.537	.498
	22	.539	.552	.561	.580	.572	.567	.585	.564	.544	.583	.567
	23	.473	.529	.489	.482	.570	.600	.611	.610	.524	.512	.492
	24	.598	.576	.564	.578	.570	.573	.585	.555	.574	.588	.590
	25	.459	.486	.513	.490	.470	.458	.430	.464	.596	.576	.577
	26	—	—	—	—	—	—	—	—	—	—	—
	27	.568	.558	.571	.561	.557	.523	.441	.409	.399	.415	.382
	28	.458	.513	.544	.553	.577	.559	.557	.569	.595	.585	.618
	29	.662	.712	.673	.727	.729	.758	.783	.734	.719	.740	.684
	30	.730	.781	.809	.818	.792	.756	.787	.674	.722	.685	.658
	31	.501	.490	.497	.490	.469	.446	.476	.418	.429	.417	.509
Hourly Means	.488	.531	.545	.555	.550	.536	.544	.530	.545	.533	.533	.519

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
71	74	85
73	65	67
54	54	58
71	65	67
—	—	—
39	39	40
30	33	29
63	63	67
80	69	66
63	57	50
81	81	75
—	—	—
61	71	61
65	55	58
69	79	64
50	46	47
52	50	57
55	55	56
—	—	—
61	60	62
63	61	64
68	70	73
54	49	50
79	88	84
60	58	61
—	—	—
49	49	46
67	54	72
71	68	65
59	64	62
46	47	56
—	—	—
61	60	61
In.	In.	In.
*603	*620	*639
*601	*561	*564
*446	*427	*472
*603	*610	*580
—	—	—
390	*389	*403
269	*294	*256
607	*629	*603
653	*654	*655
872	*809	*583
693	*716	*733
—	—	—
551	*612	*508
378	*312	*307
365	*470	*380
334	*319	*333
369	*351	*382
453	*465	*467
—	—	—
579	*568	*556
537	*504	*498
583	*559	*567
512	*521	*492
588	*606	*590
576	*562	*577
—	—	—
415	*416	*382
585	*559	*618
740	*736	*684
585	*667	*658
417	*436	*509
—	—	—
533	*533	*519

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
84	86	92	93	94	85	95	90	88	87	88	86	81
71	76	84	91	89	93	93	93	92	92	96	95	79
87	75	83	87	86	84	86	85	81	79	79	81	74
74	85	82	82	82	76	—	—	—	—	—	—	79
—	—	—	—	—	—	96	92	91	90	98	86	79
36	43	50	59	64	70	76	79	81	84	87	97	64
29	35	52	55	55	60	72	58	61	61	72	79	55
73	74	69	80	71	73	79	85	80	91	93	92	77
69	78	79	90	90	89	90	89	94	89	92	76	81
63	64	80	85	91	89	94	93	84	87	89	90	74
83	87	87	85	85	87	—	—	—	—	—	—	82
—	—	—	—	—	—	90	88	93	98	87	96	82
74	82	88	89	88	92	92	75	85	88	87	90	78
60	65	69	76	73	75	78	85	87	87	89	85	73
66	65	81	87	83	82	82	78	83	85	86	88	75
56	59	70	82	79	79	86	84	85	85	84	90	71
39	66	71	75	73	76	75	77	78	84	86	89	68
65	77	87	87	89	88	—	—	—	—	—	—	73
—	—	—	—	—	—	69	74	76	79	87	82	73
72	81	83	87	91	92	92	94	91	91	93	96	79
65	80	75	81	84	86	89	89	92	95	94	94	77
73	78	87	90	92	86	88	91	92	92	96	94	83
57	71	79	81	86	86	81	84	87	82	87	87	73
80	87	84	86	80	84	88	89	88	90	91	85	88
61	63	63	59	60	60	—	—	—	—	—	—	68
—	—	—	—	—	—	87	92	92	93	91	92	69
54	59	75	79	77	76	79	79	85	82	82	78	69
74	84	92	94	94	94	95	95	96	93	98	94	81
79	86	86	93	91	98	96	96	97	96	97	97	85
65	67	70	71	72	69	81	83	82	79	82	83	76
63	65	69	75	68	67	65	67	77	79	82	84	66
—	—	—	—	—	—	—	—	—	—	—	—	—
66	72	77	81	81	81	85	85	86	87	88	88	75
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*598	*597	*588	*573	*552	*522	*535	*570	*550	*529	*517	*498	*585
*590	*557	*510	*474	*445	*430	*464	*464	*463	*449	*449	*416	*501
*516	*516	*435	*413	*586	*368	*361	*359	*357	*346	*346	*351	*438
*603	*597	*566	*518	*524	*485	—	—	—	—	—	—	563
—	—	—	—	—	—	*568	*515	*542	*524	*504	*475	—
*333	*338	*362	*386	*382	*393	*395	*397	*399	*372	*394	*408	*426
*245	*270	*317	*323	*315	*290	*315	*298	*305	*308	*322	*373	*340
*626	*653	*545	*492	*460	*459	*473	*492	*478	*455	*449	*439	*524
*678	*692	*641	*636	*647	*671	*683	*619	*670	*618	*639	*633	*630
*602	*567	*623	*600	*646	*618	*619	*595	*562	*572	*573	*562	*689
*697	*663	*709	*677	*697	*687	—	—	—	—	—	—	—
—	—	—	—	—	—	*489	*466	*443	*426	*372	*422	*646
*538	*524	*478	*468	*465	*462	*423	*287	*293	*275	*267	*279	*448
*302	*303	*291	*295	*265	*279	*243	*287	*289	*270	*275	*273	*320
*384	*355	*384	*395	*350	*340	*340	*323	*331	*318	*304	*307	*347
*363	*325	*313	*312	*287	*276	*285	*280	*275	*270	*267	*265	*332
*376	*389	*357	*321	*325	*329	*323	*313	*309	*314	*312	*327	*359
*475	*499	*457	*422	*416	*395	—	—	—	—	—	—	—
—	—	—	—	—	—	*426	*429	*420	*433	*482	*452	*456
*585	*583	*541	*484	*468	*470	*493	*475	*452	*430	*462	*462	*530
*490	*530	*516	*521	*517	*512	*540	*501	*483	*492	*497	*489	*530
*555	*532	*482	*479	*458	*422	*425	*432	*409	*395	*423	*433	*509
*523	*562	*548	*539	*543	*534	*510	*529	*518	*518	*550	*552	*536
*576	*592	*572	*559	*496	*480	*486	*491	*486	*493	*496	*465	*548
*584	*559	*483	*424	*393	*394	—	—	—	—	—	—	—
—	—	—	—	—	—	*499	*513	*495	*464	*459	*456	*492
*427	*386	*393	*377	*354	*346	*363	*373	*397	*390	*410	*418	*432
*615	*620	*607	*561	*535	*506	*547	*549	*582	*577	*593	*586	*565
*701	*727	*723	*746	*743	*737	*724	*712	*697	*685	*686	*662	*717
*618	*607	*560	*538	*505	*469	*537	*539	*518	*487	*497	*501	*636
*521	*478	*437	*424	*365	*357	*339	*371	*390	*392	*408	*415	*436
—	—	—	—	—	—	—	—	—	—	—	—	—
*523	*519	*498	*480	*464	*453	*461	*454	*451	*438	*442	*443	*501

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Glattingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. AUGUST.	1	79	67	55	49	49	56	58	61	56	55	53
	2	—	—	—	—	—	—	—	—	—	—	—
	3	89	87	81	75	71	70	67	68	59	52	46
	4	74	71	75	66	72	62	60	61	60	60	61
	5	91	79	76	78	71	69	68	64	63	61	60
	6	84	73	64	59	67	63	61	58	60	56	60
	7	74	71	70	70	83	64	61	60	64	59	57
	8	82	78	71	87	87	88	83	78	76	74	80
	9	—	—	—	—	—	—	—	—	—	—	—
	10	87	86	82	75	67	69	64	59	58	56	53
	11	70	60	56	62	60	62	66	63	64	61	61
	12	96	90	83	76	77	72	64	61	59	58	54
	13	89	90	85	80	76	75	63	62	89	78	75
	14	75	74	63	53	67	67	68	67	60	64	61
	15	88	82	80	77	72	71	64	60	65	57	57
	16	—	—	—	—	—	—	—	—	—	—	—
	17	88	85	77	75	67	83	60	60	58	51	50
	18	80	73	66	67	70	71	69	68	69	70	68
	19	91	72	69	59	59	57	60	61	60	66	71
	20	92	94	95	95	96	94	93	82	88	82	92
	21	93	95	89	87	82	80	83	82	83	77	71
	22	87	86	85	82	89	78	81	85	79	80	83
	23	—	—	—	—	—	—	—	—	—	—	—
	24	60	56	58	60	60	66	69	71	63	64	60
	25	83	80	78	74	72	72	75	72	66	67	68
	26	92	97	84	77	73	73	71	65	62	59	53
	27	91	88	82	81	79	80	76	77	75	71	70
	28	90	89	79	79	82	81	81	81	74	79	80
	29	96	92	88	85	79	78	80	89	88	89	86
	30	—	—	—	—	—	—	—	—	—	—	—
	31	90	88	87	85	78	79	74	71	65	65	67
Hourly Means	85	81	76	74	73	72	70	69	68	66	66	68
Tension of the Vapour. AUGUST.	1	In. .441	In. .433	In. .396	In. .387	In. .407	In. .470	In. .507	In. .531	In. .495	In. .496	In. .468
	2	—	—	—	—	—	—	—	—	—	—	—
	3	.449	.537	.588	.601	.603	.625	.628	.688	.613	.534	.485
	4	.455	.508	.608	.599	.675	.656	.678	.697	.693	.699	.713
	5	.638	.631	.680	.773	.756	.769	.764	.774	.768	.738	.709
	6	.478	.482	.495	.552	.701	.676	.559	.637	.624	.598	.597
	7	.457	.489	.528	.595	.748	.636	.632	.642	.676	.613	.569
	8	.518	.512	.502	.555	.550	.593	.654	.627	.618	.603	.641
	9	—	—	—	—	—	—	—	—	—	—	—
	10	.556	.554	.557	.542	.539	.579	.530	.512	.524	.531	.513
	11	.306	.311	.339	.413	.432	.445	.507	.488	.495	.490	.474
	12	.416	.494	.560	.600	.683	.647	.690	.603	.594	.605	.584
	13	.613	.670	.689	.688	.743	.747	.691	.711	.703	.703	.717
	14	.442	.467	.479	.451	.603	.610	.620	.584	.546	.589	.596
	15	.445	.516	.569	.634	.660	.665	.622	.593	.662	.616	.631
	16	—	—	—	—	—	—	—	—	—	—	—
	17	.461	.484	.488	.506	.495	.466	.453	.434	.447	.390	.381
	18	.288	.291	.286	.331	.386	.406	.393	.395	.401	.427	.410
	19	.380	.391	.387	.346	.348	.367	.376	.388	.412	.416	.435
	20	.492	.510	.521	.530	.548	.557	.568	.537	.578	.539	.614
	21	.426	.526	.590	.637	.612	.607	.637	.621	.637	.631	.564
	22	.512	.517	.515	.518	.562	.538	.624	.616	.625	.600	.592
	23	—	—	—	—	—	—	—	—	—	—	—
	24	.273	.286	.323	.378	.398	.434	.449	.460	.426	.442	.417
	25	.364	.423	.486	.508	.511	.526	.526	.520	.511	.534	.524
	26	.409	.562	.587	.576	.552	.552	.590	.543	.514	.459	.435
	27	.459	.537	.572	.634	.655	.668	.644	.626	.618	.579	.562
	28	.495	.525	.520	.539	.646	.649	.690	.705	.670	.680	.619
	29	.506	.570	.652	.683	.665	.698	.703	.705	.551	.566	.590
	30	—	—	—	—	—	—	—	—	—	—	—
	31	.548	.555	.675	.695	.679	.715	.711	.708	.656	.663	.670
Hourly Means	.455	.492	.523	.549	.583	.589	.591	.590	.579	.567	.558	.555

R.

9	10	11
3	4	5
55	53	52
52	46	51
60	61	63
61	60	60
56	60	53
59	57	62
74	80	84
56	56	53
61	61	61
58	59	54
78	75	75
64	61	65
57	57	62
51	50	50
70	68	65
66	71	75
82	92	91
77	71	71
80	83	81
64	60	64
67	68	69
59	53	59
71	70	70
79	80	89
89	86	87
65	67	93
66	66	68
In.	In.	In.
'496	'468	'452
'534	'485	'493
'609	'713	'731
'738	'709	'709
'598	'597	'566
'613	'569	'609
'603	'641	'626
'531	'513	'459
'490	'474	'474
'605	'584	'523
'703	'717	'735
'589	'596	'587
'616	'616	'634
'390	'384	'364
'427	'410	'397
'416	'435	'442
'539	'614	'616
'631	'564	'555
'600	'592	'542
'442	'417	'453
'534	'524	'514
'459	'435	'448
'579	'562	'543
'680	'649	'663
'566	'566	'590
'663	'670	'694
'567	'558	'555

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
57	63	66	63	64	69	—	—	—	—	—	—	}	68
48	63	61	68	75	78	91	89	93	93	91	92		
71	74	83	81	85	90	77	64	80	80	82	81	}	70
55	54	59	65	62	64	75	75	64	73	79	80		
57	41	60	70	74	78	76	68	66	69	77	73	}	65
67	70	75	80	83	72	80	78	79	80	83	78		
90	88	93	93	93	92	—	—	—	—	—	—	}	85
49	52	55	57	60	67	89	92	96	86	86	85		
69	76	88	91	91	93	62	64	68	68	68	71	}	65
62	67	65	68	72	74	91	92	93	96	93	90		
81	57	66	69	67	67	80	74	80	84	86	90	}	73
64	74	80	85	84	83	71	75	70	67	70	69		
72	77	77	76	86	86	84	87	87	87	87	86	}	74
—	—	—	—	—	—	95	96	88	89	88	87		
51	64	67	72	73	76	76	86	84	81	80	81	}	71
71	81	91	85	87	90	90	90	89	88	89	86		
79	83	84	89	89	89	89	89	70	94	91	90	}	77
91	93	95	97	96	97	96	96	96	94	95	96		
83	86	91	90	90	94	92	95	95	95	89	89	}	87
85	88	91	90	92	93	—	—	—	—	—	—		
69	81	91	88	87	88	83	89	81	81	85	85	}	74
75	85	87	90	88	91	88	97	94	92	96	95		
60	83	87	81	84	85	86	84	83	88	87	89	}	78
79	80	81	83	80	81	77	75	76	88	89	90		
84	90	91	93	93	93	94	95	96	96	96	94	}	87
85	91	92	96	95	96	—	—	—	—	—	—		
77	81	80	85	83	85	91	93	94	90	91	92	}	89
70	75	79	81	82	84	84	85	84	85	86	85		
70	75	79	81	82	84	84	85	84	85	86	85	75	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
'467	'443	'407	'390	'392	'404	'444	'420	'422	'412	'420	'410	}	'438
'436	'497	'470	'473	'418	'424	'407	'372	'405	'398	'395	'400		
'741	'676	'703	'648	'648	'616	'605	'602	'570	'560	'585	'568	}	'697
'648	'616	'629	'650	'626	'631	'606	'535	'472	'467	'464	'466		
'583	'397	'462	'452	'437	'443	'440	'417	'411	'413	'449	'426	}	'612
'603	'548	'530	'517	'526	'462	'500	'504	'508	'507	'508	'499		
'616	'593	'614	'615	'619	'603	—	—	—	—	—	—	}	'580
—	—	—	—	—	—	'555	'572	'558	'522	'528	'524		
'392	'347	'326	'345	'329	'351	'313	'301	'301	'295	'281	'285	}	'428
'509	'491	'473	'457	'448	'457	'421	'405	'391	'399	'397	'369		
'551	'544	'505	'508	'512	'514	'541	'533	'535	'562	'568	'563	}	'556
'725	'500	'521	'531	'466	'468	'476	'460	'431	'397	'397	'386		
'575	'570	'548	'496	'480	'464	'455	'464	'450	'439	'442	'430	}	'516
'644	'636	'620	'603	'644	'629	—	—	—	—	—	—		
—	—	—	—	—	—	'494	'483	'474	'475	'474	'446	}	'577
'356	'386	'365	'365	'363	'361	'358	'328	'310	'304	'300	'298		
'396	'375	'384	'344	'348	'347	'340	'343	'331	'319	'322	'322	}	'356
'464	'466	'467	'489	'481	'493	'489	'492	'497	'501	'490	'483		
'603	'565	'547	'545	'523	'524	'515	'495	'484	'454	'449	'442	}	'532
'589	'577	'574	'563	'578	'560	'556	'543	'528	'528	'512	'525		
'547	'530	'528	'519	'509	'501	—	—	—	—	—	—	}	'502
—	—	—	—	—	—	'405	'398	'388	'364	'314	'280		
'443	'411	'398	'364	'362	'360	'353	'340	'316	'316	'322	'336	}	'378
'516	'530	'516	'504	'503	'499	'486	'493	'472	'453	'446	'421		
'427	'473	'468	'432	'438	'441	'443	'419	'408	'425	'412	'420	}	'476
'550	'495	'486	'458	'446	'445	'449	'427	'431	'474	'472	'479		
'620	'609	'595	'568	'553	'557	'535	'519	'506	'490	'488	'471	}	'581
'593	'557	'547	'540	'519	'540	—	—	—	—	—	—		
—	—	—	—	—	—	'547	'491	'479	'479	'495	'543	}	'574
'641	'624	'595	'596	'575	'532	'525	'527	'527	'495	'544	'545		
'548	'518	'511	'499	'490	'486	'471	'457	'446	'440	'441	'436	'515	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. SEPTEMBER.	1 93	92	82	79	78	57	52	58	62	60	62	73
	2 94	93	92	86	81	79	81	74	74	75	76	81
	3 95	94	87	92	89	88	89	94	97	97	94	97
	4 94	93	86	88	89	89	87	87	81	83	84	85
	5 98	95	94	89	84	88	88	84	85	88	86	89
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 96	97	92	85	85	83	82	75	72	71	72	72
	8 84	81	78	73	71	70	68	70	79	62	57	59
	9 59	56	59	58	60	58	50	55	51	49	47	50
	10 59	62	65	52	51	47	44	47	53	54	56	60
	11 90	90	81	80	80	80	78	75	72	77	83	83
	12 95	93	87	81	82	77	86	84	86	78	78	81
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 97	97	93	87	80	76	78	77	78	82	88	85
	15 72	65	59	57	52	43	47	39	35	35	38	42
	16 85	81	69	63	66	65	65	62	62	63	65	66
	17 88	83	83	84	81	75	80	79	77	86	88	91
	18 86	84	83	76	68	69	71	71	73	75	73	79
	19 91	88	88	76	77	76	73	67	71	72	69	71
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 63	78	78	76	67	63	62	62	58	59	55	51
	22 88	89	80	79	81	79	75	76	73	72	73	76
	23 92	95	94	84	82	78	79	73	73	73	75	80
	24 93	92	87	94	95	95	94	94	90	85	85	85
	25 91	90	89	95	94	94	94	92	94	95	93	93
	26 91	89	85	86	83	79	71	73	75	77	69	77
	27 —	—	—	—	—	—	—	—	—	—	—	—
	28 89	88	86	79	72	82	75	74	75	71	71	72
	29 87	82	83	81	78	74	66	71	67	68	78	85
	30 88	86	79	76	69	72	72	75	75	76	79	82
Hourly Means	87	86	82	79	77	74	73	73	73	72	73	76
Tension of the Vapour. SEPTEMBER.	In. 558	In. 626	In. 624	In. 715	In. 749	In. 593	In. 588	In. 613	In. 668	In. 639	In. 615	In. 665
	2 575	647	698	735	772	735	781	763	717	713	713	741
	3 656	685	669	680	706	725	717	724	728	746	713	730
	4 606	647	657	681	703	773	762	763	760	755	749	745
	5 700	729	772	801	809	786	768	765	760	788	772	744
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 587	684	766	799	835	850	889	820	790	768	752	757
	8 435	449	463	467	485	494	485	488	518	421	386	378
	9 225	233	260	270	293	291	261	306	297	292	285	300
	10 317	334	351	299	302	294	275	295	339	353	372	397
	11 538	582	568	615	626	646	648	687	691	672	677	709
	12 636	713	763	768	773	749	718	532	588	590	600	633
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 598	667	727	733	754	786	781	799	827	801	787	808
	15 307	287	263	256	252	217	251	216	269	214	237	251
	16 253	295	327	333	380	390	389	377	382	372	374	380
	17 361	355	380	395	416	414	456	445	421	434	420	415
	18 392	394	403	425	423	444	447	451	467	476	478	488
	19 292	342	431	410	518	543	559	512	541	530	522	514
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 234	296	293	297	277	277	289	304	294	299	286	265
	22 215	250	307	369	391	410	412	422	424	422	434	432
	23 278	381	475	492	518	543	583	562	572	567	561	553
	24 464	522	512	546	555	569	575	565	476	457	461	447
	25 320	325	326	345	375	395	401	403	420	427	398	367
	26 254	276	294	339	358	352	349	373	375	388	369	380
	27 —	—	—	—	—	—	—	—	—	—	—	—
	28 210	231	253	261	268	345	325	323	350	351	346	336
	29 387	395	419	451	465	467	434	458	437	424	449	475
	30 410	435	424	462	445	484	497	506	489	494	483	455
Hourly Means	416	453	478	500	516	523	526	520	524	516	512	513

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
60	62	73	80	83	81	85	89	81	89	93	94	91	92	93	79
75	76	81	85	81	93	92	85	85	89	91	89	90	91	92	85
97	94	97	97	97	95	96	92	95	96	95	96	97	96	93	94
83	84	85	89	91	92	92	93	95	96	97	97	96	96	97	91
88	86	89	82	79	86	93	93	94	—	—	—	—	—	—	90
71	72	72	78	83	69	89	85	82	78	96	96	95	97	96	81
62	57	59	60	70	72	70	56	55	52	72	76	78	83	83	64
49	47	50	48	51	54	60	59	69	71	48	47	54	52	54	58
54	56	60	61	71	78	—	89	92	92	70	70	67	68	62	66
77	83	83	85	89	91	93	94	94	94	97	97	91	89	90	87
78	78	81	86	91	90	88	94	95	—	96	92	97	97	97	89
—	—	—	—	—	—	—	—	—	94	95	97	97	95	96	81
82	88	85	78	85	85	84	79	76	80	75	71	68	73	73	58
35	38	42	47	66	60	61	63	64	72	69	71	76	77	83	73
63	65	66	66	65	76	81	81	77	83	80	83	85	86	87	85
86	88	91	89	86	87	88	89	87	86	87	87	87	86	88	81
75	73	79	81	86	91	93	55	89	93	90	92	90	91	89	80
72	69	71	81	79	78	79	81	87	—	—	—	—	—	—	75
—	—	—	—	—	—	—	—	—	88	90	89	88	83	82	84
59	55	54	81	85	87	86	81	81	84	87	87	88	88	93	87
72	73	76	82	89	90	91	90	92	93	91	90	90	92	95	90
73	75	80	84	89	92	89	93	95	95	94	96	95	96	95	87
85	85	85	87	86	87	91	91	93	91	90	90	91	90	91	84
95	93	93	91	89	90	85	86	88	88	85	84	88	84	89	80
77	69	77	82	81	85	85	85	89	—	—	—	—	—	—	84
—	—	—	—	—	—	—	—	—	91	91	95	90	93	93	79
71	71	72	80	80	80	87	79	75	78	77	75	75	83	87	80
68	78	85	84	82	68	76	88	82	87	96	87	87	87	86	80
76	79	82	85	94	90	79	77	73	70	75	85	86	84	83	80
72	73	76	79	82	82	85	82	84	86	85	86	86	87	87	81
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'639	'645	'665	'688	'659	'660	'659	'633	'648	'627	'621	'597	'590	'574	'577	'635
'747	'743	'741	'742	'721	'737	'718	'668	'661	'674	'672	'649	'641	'657	'640	'706
'746	'713	'730	'730	'714	'660	'646	'647	'657	'662	'682	'687	'682	'670	'606	'688
'755	'749	'745	'723	'708	'701	'701	'695	'697	'712	'726	'726	'724	'712	'692	'713
'788	'772	'744	'668	'608	'604	'585	'568	'570	—	—	—	—	—	—	'685
—	—	—	—	—	—	—	—	—	'608	'601	'591	'570	'593	'582	'667
'768	'752	'737	'725	'722	'617	'674	'629	'597	'525	'446	'446	'440	'450	'452	'667
'121	'386	'378	'365	'368	'374	'349	'269	'247	'228	'212	'203	'214	'207	'212	'364
'292	'285	'300	'277	'285	'304	'330	'323	'372	'379	'327	'372	'354	'342	'310	'322
'353	'372	'397	'394	'437	'451	—	'447	'455	'445	'457	'489	'494	'506	'422	'388
'672	'677	'700	'678	'613	'633	'624	'592	'592	'576	'618	'593	'631	'613	'631	'627
'590	'600	'633	'606	'580	'538	'493	'503	'522	—	—	—	—	—	—	'616
—	—	—	—	—	—	—	—	—	'575	'576	'583	'583	'578	'575	'662
'801	'787	'808	'755	'775	'770	'717	'668	'586	'575	'511	'454	'344	'333	'319	'662
'214	'297	'251	'252	'280	'264	'257	'255	'262	'278	'262	'267	'258	'250	'261	'255
'372	'374	'380	'384	'382	'403	'407	'383	'347	'338	'322	'335	'341	'342	'358	'359
'434	'420	'415	'409	'398	'407	'407	'407	'405	'396	'395	'399	'399	'392	'407	'406
'476	'478	'488	'456	'406	'388	'397	'304	'375	'366	'354	'337	'304	'301	'287	'398
'530	'522	'514	'534	'473	'467	'437	'423	'408	—	—	—	—	—	—	'459
—	—	—	—	—	—	—	—	—	'509	'510	'462	'388	'353	'319	'278
'299	'286	'267	'347	'318	'299	'292	'271	'261	'262	'253	'245	'240	'242	'239	'347
'422	'434	'432	'430	'378	'357	'331	'320	'308	'303	'297	'290	'278	'276	'282	'516
'567	'561	'553	'536	'558	'556	'540	'544	'515	'527	'540	'534	'491	'479	'472	'444
'157	'461	'447	'447	'430	'413	'406	'389	'378	'366	'354	'346	'341	'328	'324	'344
'427	'398	'367	'345	'333	'342	'322	'322	'333	'322	'315	'313	'288	'268	'260	'318
'388	'369	'380	'384	'366	'370	'336	'325	'296	—	—	—	—	—	—	'313
—	—	—	—	—	—	—	—	—	'264	'255	'229	'226	'218	'218	'365
'351	'346	'336	'365	'347	'335	'329	'308	'302	'307	'308	'306	'306	'335	'335	'418
'424	'449	'475	'455	'407	'349	'371	'367	'398	'407	'418	'400	'404	'400	'403	'433
'494	'483	'455	'503	'506	'495	'470	'429	'380	'345	'349	'357	'335	'314	'332	'475
516	512	513	508	492	481	472	450	445	445	438	432	418	414	406	475

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Fastings Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. OCTOBER.	1 77	77	76	74	72	71	72	73	77	74	72	76
	2 89	90	91	89	86	83	79	79	70	66	68	69
	3 88	86	81	78	77	80	80	79	75	73	71	73
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 95	95	96	88	85	83	76	76	75	71	59	69
	6 61	88	89	89	87	85	87	81	82	77	74	75
	7 91	94	91	84	78	76	76	75	77	79	80	82
	8 95	91	92	89	92	90	90	94	92	93	92	92
	9 97	97	96	93	80	81	88	84	76	80	79	83
	10 87	74	68	71	75	77	86	84	80	79	84	90
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 84	80	77	76	72	72	72	72	73	70	77	81
	13 89	89	88	89	90	89	85	87	89	95	95	96
	14 95	95	96	82	88	81	72	67	63	64	67	82
	15 93	86	88	72	65	64	60	56	58	55	62	67
	16 87	88	84	82	89	86	88	86	88	94	91	95
	17 89	92	83	89	90	89	89	87	78	79	73	72
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 96	94	79	66	54	62	59	61	59	58	62	69
	20 91	97	85	89	83	79	77	80	82	79	80	75
	21 87	87	85	78	73	71	68	68	70	76	78	80
	22 87	87	88	93	86	80	80	67	72	78	81	91
	23 92	86	82	85	81	97	95	93	84	86	75	70
	24 92	94	89	85	83	65	62	62	57	57	56	46
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 89	95	91	90	91	89	79	76	75	78	80	80
	27 93	88	85	83	79	78	67	50	68	72	73	74
	28 85	88	82	78	73	72	63	68	63	66	68	81
	29 86	84	84	81	75	74	71	61	57	58	56	67
	30 78	78	78	76	67	60	57	58	61	63	60	64
	31 70	84	72	76	76	80	80	84	90	92	80	91
	Nov. 1 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	88	88	85	82	80	78	76	74	74	75	74	77
Tension of the Vapour. OCTOBER.	1 In. .302	In. .281	In. .283	In. .272	In. .270	In. .276	In. .285	In. .290	In. .311	In. .307	In. .284	In. .289
	2 .283	.281	.281	.281	.285	.291	.283	.296	.266	.261	.284	.283
	3 .213	.221	.266	.297	.281	.322	.327	.328	.326	.310	.289	.272
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 .280	.290	.336	.354	.397	.422	.420	.420	.412	.407	.365	.385
	6 .188	.238	.301	.394	.419	.435	.458	.457	.459	.446	.414	.412
	7 .332	.366	.459	.484	.483	.488	.510	.520	.497	.525	.519	.496
	8 .486	.471	.506	.498	.527	.532	.479	.469	.451	.447	.440	.430
	9 .438	.449	.452	.577	.563	.562	.573	.549	.369	.357	.332	.333
	10 .195	.178	.174	.188	.208	.233	.256	.260	.259	.264	.270	.273
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 .308	.333	.347	.371	.367	.379	.387	.387	.394	.388	.410	.413
	13 .306	.301	.298	.306	.303	.290	.278	.282	.287	.297	.287	.264
	14 .197	.192	.230	.232	.290	.282	.263	.249	.238	.247	.249	.258
	15 .203	.193	.219	.206	.200	.200	.195	.186	.195	.196	.214	.203
	16 .278	.293	.296	.301	.353	.359	.384	.412	.410	.425	.408	.421
	17 .181	.202	.161	.177	.184	.185	.189	.189	.168	.171	.157	.151
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 .175	.166	.180	.182	.173	.204	.196	.188	.182	.184	.194	.197
	20 .241	.264	.246	.261	.248	.250	.256	.267	.249	.224	.228	.209
	21 .164	.167	.171	.182	.183	.186	.187	.193	.187	.191	.192	.193
	22 .196	.195	.199	.210	.195	.183	.176	.152	.161	.159	.155	.163
	23 .124	.126	.123	.138	.162	.208	.212	.227	.213	.215	.207	.190
	24 .176	.191	.205	.219	.232	.196	.192	.192	.167	.169	.161	.132
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 .169	.199	.217	.236	.262	.295	.295	.303	.298	.296	.295	.283
	27 .340	.309	.290	.272	.258	.273	.230	.193	.235	.225	.220	.213
	28 .140	.145	.148	.144	.146	.146	.135	.156	.156	.163	.163	.166
	29 .181	.180	.188	.212	.215	.228	.196	.190	.185	.185	.172	.190
	30 .158	.156	.160	.164	.152	.144	.138	.141	.147	.149	.141	.139
	31 .124	.153	.134	.139	.144	.157	.160	.175	.193	.203	.191	.215
	Nov. 1 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.236	.242	.254	.270	.279	.286	.284	.284	.275	.274	.268	.266

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
74	72	76
66	68	69
73	71	73
—	—	—
71	59	69
77	74	75
79	80	82
93	92	92
80	79	83
79	84	90
—	—	—
70	77	81
95	95	96
64	67	82
55	62	67
94	91	95
79	73	72
—	—	—
58	62	69
79	80	75
76	78	80
78	81	91
86	75	70
57	56	46
—	—	—
78	80	80
72	73	74
66	68	81
58	56	67
63	60	64
92	80	91
—	—	—
75	74	77
In.	In.	In.
*307	*284	*289
*261	*281	*283
*310	*289	*272
—	—	—
*407	*365	*385
*446	*414	*412
*525	*519	*496
*447	*440	*430
*357	*332	*333
*264	*270	*273
—	—	—
*388	*410	*413
*297	*287	*264
*247	*249	*258
*196	*214	*203
*425	*408	*421
*171	*157	*151
—	—	—
*184	*194	*197
*224	*228	*209
*191	*192	*193
*159	*155	*163
*215	*207	*190
*169	*161	*182
—	—	—
*296	*295	*282
*225	*220	*213
*163	*163	*166
*185	*172	*190
*149	*141	*139
*203	*191	*215
—	—	—
*274	*268	*266

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
80	79	80	80	80	80	84	85	93	92	88	89	79
71	82	79	87	93	88	91	88	91	91	91	90	83
83	79	88	78	81	83	—	—	—	—	—	—	83
83	—	—	—	—	—	94	93	93	90	92	93	83
77	82	71	75	83	79	85	93	93	95	93	88	83
87	76	87	94	93	92	91	86	90	89	90	91	85
91	87	86	88	89	74	94	94	92	94	94	95	86
81	92	93	94	95	95	95	97	96	97	97	96	93
81	81	81	75	83	87	84	89	90	88	91	73	85
92	98	92	93	92	95	—	—	—	—	—	—	85
—	—	—	—	—	—	94	84	85	85	91	87	85
78	87	90	91	94	96	96	96	91	87	88	90	83
97	91	90	80	83	84	86	85	88	88	87	87	89
89	92	86	87	90	93	91	85	83	87	88	95	84
78	77	78	73	74	75	74	82	83	90	84	88	74
90	86	87	85	79	84	86	85	80	84	81	87	86
80	82	80	79	86	81	—	—	—	—	—	—	85
—	—	—	—	—	—	87	92	90	93	90	87	85
74	75	75	76	78	74	82	86	90	92	88	91	75
77	85	85	87	93	93	87	87	89	92	94	91	86
81	79	85	84	73	79	81	81	83	82	84	79	79
78	79	87	89	94	95	92	94	96	95	93	90	86
72	75	73	81	87	90	89	78	92	93	94	96	85
69	73	75	79	85	90	—	—	—	—	—	—	78
—	—	—	—	—	—	95	96	94	94	94	88	84
79	79	74	77	84	85	81	88	88	87	90	90	84
75	75	80	78	76	79	88	92	83	77	78	81	78
88	91	87	95	95	96	95	87	72	92	89	85	82
73	74	73	79	75	73	70	72	75	74	77	74	73
64	69	70	72	72	73	74	79	76	75	72	70	69
93	93	96	94	96	97	—	—	—	—	—	—	87
—	—	—	—	—	—	87	90	89	89	88	92	87
81	82	83	83	85	86	87	88	87	89	88	88	82
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
295	291	278	265	259	262	266	261	276	272	275	277	280
267	253	242	234	231	230	234	220	220	210	210	216	256
258	248	261	230	235	230	—	—	—	—	—	—	269
—	—	—	—	—	—	284	258	249	237	239	246	—
353	313	301	303	287	256	268	255	244	237	234	236	322
417	374	400	375	348	385	386	378	354	333	346	322	373
488	535	534	539	535	481	520	479	456	480	480	482	487
421	424	424	442	441	444	445	439	442	449	443	440	458
306	296	292	250	226	224	215	227	224	213	212	171	350
228	220	209	210	210	205	—	—	—	—	—	—	247
—	—	—	—	—	—	337	313	313	318	325	291	247
409	437	379	359	359	361	358	357	350	327	331	335	369
273	252	248	226	232	225	223	248	211	210	204	200	259
236	239	250	248	254	258	256	243	228	233	213	215	242
294	198	197	188	193	205	205	226	228	264	265	283	211
394	367	350	304	242	248	251	224	199	199	187	185	312
166	162	150	141	144	142	—	—	—	—	—	—	172
—	—	—	—	—	—	185	190	182	190	181	174	—
205	200	200	200	201	202	232	232	238	239	236	238	202
206	204	198	188	180	180	169	167	161	162	162	168	212
191	180	173	177	167	171	174	174	176	183	188	191	181
137	134	141	138	131	120	114	115	112	110	115	118	151
191	192	174	188	199	193	193	169	195	193	190	180	183
169	169	166	156	159	159	—	—	—	—	—	—	178
—	—	—	—	—	—	182	178	183	183	177	165	—
313	312	301	303	323	326	322	331	331	321	337	341	292
207	201	206	189	184	183	190	191	166	155	158	144	218
156	145	138	156	167	169	150	157	150	175	166	165	154
188	180	174	185	172	163	152	151	156	154	157	153	179
138	141	144	147	141	140	139	139	132	133	126	124	143
222	227	242	232	236	239	—	—	—	—	—	—	215
—	—	—	—	—	—	280	291	291	299	299	311	—
261	255	251	243	239	237	249	244	240	240	239	236	256

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gauging Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. NOVEMBER.	2	94	92	95	92	93	97	93	93	95	94	96
	3	95	93	94	91	89	80	79	77	76	82	89
	4	91	90	92	82	71	67	62	60	57	57	65
	5	92	89	82	81	76	70	69	72	70	69	84
	6	95	91	64	88	88	79	74	66	68	57	72
	7	86	81	82	84	80	82	78	77	73	70	62
	8	—	—	—	—	—	—	—	—	—	—	—
	9	96	96	96	96	96	94	93	92	92	94	91
	10	93	95	93	94	88	85	80	81	82	90	85
	11	90	92	93	93	92	90	91	93	93	90	86
	12	82	79	82	82	82	79	77	78	77	80	81
	13	86	84	84	85	84	87	89	87	84	84	87
	14	90	89	91	89	84	84	80	85	77	70	72
	15	—	—	—	—	—	—	—	—	—	—	—
	16	93	91	95	93	93	90	89	85	86	88	90
	17	92	91	89	89	83	87	85	78	82	85	86
	18	93	94	95	92	84	74	74	63	67	66	74
	19	92	88	85	90	91	89	80	90	92	90	89
	20	81	77	77	76	68	73	66	68	71	74	71
	21	79	80	77	77	71	70	73	73	74	80	75
	22	—	—	—	—	—	—	—	—	—	—	—
	23	80	83	82	79	71	75	65	58	58	63	67
	24	91	89	90	88	82	74	79	68	79	71	69
	25	84	84	87	90	80	78	86	73	76	75	80
	26	75	72	71	76	79	76	85	85	85	70	71
	27	76	82	85	88	74	71	75	80	81	79	75
	28	93	93	82	84	85	82	72	68	67	68	76
	29	—	—	—	—	—	—	—	—	—	—	—
	30	80	86	84	83	76	77	76	78	81	79	79
Hourly Means	88	87	86	86	83	80	79	77	78	77	77	81
Tension of the Vapour. NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	.317	.308	.311	.331	.313	.368	.356	.354	.362	.375	.375
	3	.300	.298	.305	.315	.323	.313	.312	.300	.307	.294	.317
	4	.240	.240	.272	.286	.252	.249	.239	.230	.223	.214	.212
	5	.201	.198	.204	.226	.216	.243	.243	.253	.240	.240	.243
	6	.161	.161	.136	.213	.252	.258	.254	.237	.243	.245	.199
	7	.201	.203	.217	.236	.244	.265	.273	.261	.259	.265	.244
	8	—	—	—	—	—	—	—	—	—	—	—
	9	.338	.337	.347	.351	.382	.374	.385	.381	.376	.378	.371
	10	.328	.333	.336	.350	.319	.354	.348	.352	.352	.355	.334
	11	.331	.340	.343	.346	.347	.346	.345	.351	.349	.354	.354
	12	.245	.236	.245	.253	.260	.256	.253	.263	.261	.264	.258
	13	.263	.260	.260	.263	.263	.272	.375	.270	.265	.265	.267
	14	.258	.249	.246	.248	.242	.238	.232	.250	.232	.212	.214
	15	—	—	—	—	—	—	—	—	—	—	—
	16	.255	.259	.268	.272	.288	.297	.293	.280	.277	.275	.272
	17	.227	.234	.218	.261	.265	.270	.272	.270	.272	.276	.278
	18	.263	.257	.283	.315	.324	.302	.292	.248	.250	.235	.247
	19	.241	.230	.219	.224	.229	.232	.232	.231	.233	.233	.223
	20	.178	.169	.169	.168	.164	.181	.173	.181	.196	.199	.190
	21	.178	.173	.170	.175	.166	.172	.181	.187	.199	.219	.200
	22	—	—	—	—	—	—	—	—	—	—	—
	23	.135	.138	.138	.140	.141	.147	.130	.123	.128	.138	.144
	24	.175	.165	.171	.177	.189	.187	.198	.189	.197	.182	.160
	25	.117	.103	.198	.101	.089	.090	.076	.085	.091	.089	.103
	26	.081	.079	.085	.096	.107	.115	.130	.134	.138	.108	.103
	27	.103	.102	.108	.119	.106	.105	.119	.135	.144	.150	.146
	28	.204	.202	.189	.191	.196	.201	.187	.187	.187	.181	.188
	29	—	—	—	—	—	—	—	—	—	—	—
	30	.121	.121	.118	.123	.120	.123	.123	.126	.133	.125	.120
Hourly Means	.218	.216	.223	.231	.235	.238	.241	.235	.237	.235	.230	.233

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HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
95	94	96	96	97	97	96	96	95	95	96	90	90	93	95	94
76	82	89	89	89	89	88	88	81	88	93	91	80	92	92	87
54	57	65	71	78	78	80	80	82	84	86	80	88	87	80	77
69	75	84	93	97	88	92	88	92	91	89	91	87	90	87	84
68	57	72	70	75	77	85	89	88	89	90	81	82	86	85	79
76	70	62	39	61	63	63	61	61	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	92	88	94	97	97	94	78
94	91	93	90	93	92	92	90	91	91	92	91	92	91	92	93
90	85	84	85	85	85	84	82	82	88	80	88	88	91	88	87
90	90	86	89	86	85	80	80	81	83	82	82	83	83	80	87
80	79	84	85	80	81	79	81	81	82	80	80	80	80	80	80
84	84	87	87	85	85	87	86	86	86	87	86	88	87	90	86
70	72	75	75	74	80	76	77	79	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	90	80	90	91	93	93	83
88	90	89	93	93	92	90	90	89	91	89	91	91	89	91	90
85	86	90	92	92	92	91	91	89	92	89	90	90	91	93	89
66	74	76	83	82	83	85	88	89	90	93	96	93	90	92	84
90	89	90	91	91	88	93	85	87	87	87	87	87	88	84	89
74	74	77	77	83	86	89	92	93	93	86	89	87	82	81	80
80	75	86	80	84	79	81	79	80	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	71	69	73	71	79	83	77
63	67	78	78	77	74	81	78	92	93	86	87	90	90	95	78
71	69	76	80	78	78	81	79	80	89	82	75	79	80	90	80
75	80	87	91	94	87	75	75	75	77	74	69	82	81	81	81
70	71	79	78	76	71	73	74	75	75	80	85	78	72	76	77
79	75	79	66	72	82	83	92	95	95	95	95	95	96	93	83
68	76	76	74	79	75	86	82	89	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	71	71	76	81	80	74	78
79	76	79	79	82	86	95	88	89	82	82	86	86	88	87	83
77	77	81	82	83	83	84	84	85	87	86	86	87	88	87	83
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'375	'375	'379	'377	'373	'376	'364	'350	'343	'328	'335	'279	'244	'260	'280	'337
'294	'317	'307	'307	'302	'304	'301	'301	'263	'243	'246	'228	'234	'235	'242	'287
'214	'212	'215	'212	'218	'211	'201	'202	'205	'208	'205	'207	'204	'198	'199	'223
'240	'243	'236	'215	'201	'185	'193	'172	'170	'156	'159	'161	'152	'169	'159	'203
'245	'199	'222	'203	'190	'183	'191	'195	'197	'199	'190	'188	'184	'193	'194	'204
'265	'244	'245	'211	'215	'230	'231	'214	'214	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	'316	'304	'329	'341	'344	'336	'257
'378	'371	'365	'357	'359	'354	'355	'347	'345	'345	'340	'335	'338	'337	'328	'355
'355	'334	'321	'326	'324	'326	'329	'328	'322	'341	'334	'331	'323	'331	'323	'336
'354	'354	'329	'329	'316	'309	'273	'264	'262	'265	'263	'264	'264	'264	'252	'311
'264	'258	'268	'264	'257	'257	'250	'254	'247	'249	'247	'247	'247	'246	'248	'253
'265	'267	'272	'272	'268	'268	'270	'263	'256	'254	'258	'254	'257	'253	'264	'268
'212	'214	'315	'221	'228	'252	'245	'247	'250	—	—	—	—	—	—	'245
—	—	—	—	—	—	—	—	'255	'251	'252	'241	'249	'251	—	—
'275	'272	'270	'276	'278	'269	'263	'262	'258	'254	'247	'244	'233	'232	'233	'265
'276	'278	'290	'284	'289	'287	'296	'299	'297	'298	'280	'281	'281	'279	'259	'275
'235	'247	'244	'231	'239	'239	'242	'246	'240	'246	'253	'255	'249	'239	'241	'258
'233	'223	'211	'210	'210	'212	'211	'194	'184	'188	'188	'188	'188	'190	'178	'212
'199	'150	'185	'181	'191	'193	'193	'191	'186	'178	'173	'184	'189	'188	'180	'183
'219	'200	'200	'210	'224	'230	'238	'235	'228	—	—	—	—	—	—	'182
—	—	—	—	—	—	—	—	—	'127	'123	'128	'125	'139	'137	'159
'138	'144	'158	'139	'154	'132	'164	'137	'195	'199	'193	'195	'190	'187	'193	'157
'182	'160	'156	'160	'143	'143	'145	'138	'138	'152	'135	'121	'119	'115	'124	'157
'089	'085	'103	'105	'106	'091	'080	'080	'078	'080	'078	'075	'093	'094	'088	'095
'108	'103	'102	'105	'106	'100	'102	'103	'111	'111	'120	'125	'112	'103	'103	'107
'150	'146	'154	'136	'152	'167	'169	'179	'192	'197	'196	'195	'195	'207	'204	'153
'181	'188	'180	'172	'177	'167	'180	'161	'167	—	—	—	—	—	—	'170
—	—	—	—	—	—	—	—	—	'124	'119	'122	'134	'131	'125	—
'125	'120	'118	'108	'107	'109	'109	'096	'095	'086	'080	'085	'076	'080	'077	'107
'235	'230	'233	'226	'225	'225	'224	'219	'21	'216	'212	'211	'209	'210	'209	'224

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. DECEMBER.	1	86	93	71	84	84	84	80	79	80	84	83
	2	91	94	95	95	97	96	96	95	92	92	90
	3	71	71	65	57	69	70	75	80	59	65	70
	4	85	86	86	84	93	72	72	73	80	76	76
	5	78	88	88	81	86	81	78	75	79	87	88
	6	—	—	—	—	—	—	—	—	—	—	—
	7	78	75	82	80	80	81	81	81	83	84	84
	8	87	85	83	87	80	77	72	74	73	74	74
	9	80	78	79	76	81	80	81	79	75	76	76
	10	87	87	80	90	95	95	95	93	95	96	95
	11	82	78	81	78	75	72	74	76	76	80	77
	12	86	94	85	88	85	84	81	76	77	77	81
	13	—	—	—	—	—	—	—	—	—	—	—
	14	91	93	80	80	74	76	71	65	66	78	72
	15	100	100	100	95	85	81	62	60	65	54	60
	16	80	81	70	78	74	74	72	74	79	74	85
	17	85	87	85	89	86	90	85	84	82	82	81
	18	80	79	77	78	72	69	71	69	64	76	80
	19	82	80	89	84	77	73	69	74	89	79	69
	20	—	—	—	—	—	—	—	—	—	—	—
	21	83	81	75	76	75	67	63	60	55	56	62
	22	82	87	81	69	69	71	63	66	66	71	73
	23	100	100	100	100	93	83	79	77	74	71	70
	24	79	89	83	84	78	78	78	79	77	77	81
	25 ^a	—	—	—	—	—	—	—	—	—	—	—
	26	96	92	86	88	82	76	75	78	81	74	81
	27	—	—	—	—	—	—	—	—	—	—	—
	28	78	73	73	74	71	73	70	70	71	72	71
	29	76	86	81	79	74	75	83	80	75	76	76
	30	96	95	95	95	95	95	94	89	82	82	88
	31	96	95	98	94	93	90	90	88	88	83	88
Hourly Means	85	87	83	83	82	79	77	77	76	76	78	81
Tension of the Vapour. DECEMBER.	1	In. °076	In. °079	In. °066	In. °060	In. °097	In. °108	In. °110	In. °116	In. °121	In. °128	In. °128
	2	°179	°191	°198	°204	°216	°223	°229	°244	°257	°245	°255
	3	°140	°139	°125	°117	°136	°139	°150	°152	°114	°121	°124
	4	°121	°122	°128	°141	°165	°136	°140	°143	°157	°155	°155
	5	°131	°143	°143	°140	°156	°157	°155	°151	°151	°159	°164
	6	—	—	—	—	—	—	—	—	—	—	—
	7	°158	°154	°165	°176	°178	°186	°189	°192	°196	°198	°201
	8	°196	°192	°176	°188	°178	°171	°175	°164	°163	°164	°157
	9	°149	°144	°142	°135	°144	°143	°149	°147	°142	°143	°143
	10	°159	°159	°148	°153	°158	°161	°164	°166	°173	°177	°168
	11	°116	°105	°106	°104	°108	°110	°114	°121	°121	°130	°126
	12	°096	°095	°085	°086	°080	°085	°083	°079	°085	°088	°094
	13	—	—	—	—	—	—	—	—	—	—	—
	14	°087	°090	°079	°077	°073	°079	°079	°079	°085	°095	°081
	15	°068	°066	°073	°077	°087	°091	°079	°085	°096	°082	°085
	16	°067	°069	°063	°082	°091	°108	°110	°114	°121	°111	°121
	17	°104	°100	°108	°122	°125	°130	°129	°124	°122	°126	°122
	18	°066	°065	°061	°074	°078	°100	°108	°110	°126	°128	°125
	19	°135	°133	°143	°135	°128	°128	°126	°142	°159	°148	°126
	20	—	—	—	—	—	—	—	—	—	—	—
	21	°101	°093	°079	°084	°088	°086	°088	°088	°086	°086	°091
	22	°101	°101	°091	°082	°085	°089	°083	°089	°095	°102	°102
	23	°066	°057	°058	°072	°085	°086	°089	°094	°097	°091	°092
	24	°120	°139	°132	°140	°137	°152	°154	°154	°154	°155	°154
	25 ^a	—	—	—	—	—	—	—	—	—	—	—
	26	°093	°089	°081	°094	°105	°112	°123	°131	°142	°158	°142
	27	—	—	—	—	—	—	—	—	—	—	—
	28	°160	°148	°150	°152	°148	°144	°124	°132	°125	°124	°125
	29	°083	°093	°092	°097	°107	°115	°127	°124	°116	°121	°121
	30	°207	°209	°208	°212	°214	°226	°219	°221	°198	°195	°198
	31	°188	°187	°202	°206	°215	°213	°213	°215	°219	°207	°210
Hourly Means	°122	°122	°119	°125	°130	°133	°134	°137	°139	°139	°138	°140

^a Christmas Day.Note.—Wet Thermometer higher than the Dry Thermometer where the reading appears in *italics*.

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9	10	11
3	4	5
84	83	82
92	90	91
65	70	72
76	76	78
79	87	88
—	—	—
84	81	80
74	74	81
76	76	74
96	95	86
80	77	81
77	81	81
—	—	—
78	72	74
54	60	67
74	85	82
82	81	79
76	80	76
79	69	—
—	—	—
56	62	79
71	73	84
71	70	97
77	77	81
—	—	—
74	81	79
—	—	—
72	71	74
76	76	77
82	88	91
83	88	93
76	78	81
In.	In.	In.
*128	*128	*132
*245	*239	*255
*121	*124	*128
*155	*155	*156
*158	*164	*168
—	—	—
*198	*201	*221
*161	*157	*165
*143	*143	*141
*177	*168	*154
*130	*126	*133
*088	*094	*100
—	—	—
*085	*084	*085
*082	*085	*081
*111	*121	*106
*126	*122	*105
*126	*128	*125
*148	*126	*133
—	—	—
*086	*091	*100
*102	*102	*105
*091	*092	*091
*155	*154	*167
—	—	—
*158	*112	*150
—	—	—
*124	*125	*124
*121	*121	*125
*195	*198	*197
*207	*210	*215
*139	*138	*140

dashes.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
85	77	83	79	78	80	82	87	85	92	90	90	83
80	93	93	89	87	83	75	67	82	84	80	73	88
75	79	74	77	80	74	78	78	78	80	80	78	73
66	68	80	89	90	89	89	89	91	90	87	84	82
84	74	75	78	79	80	—	—	—	—	—	—	81
—	—	—	—	—	—	86	81	81	81	80	80	81
89	89	92	91	95	94	94	89	93	95	95	94	87
80	79	78	78	80	78	76	78	79	78	82	82	79
78	86	85	83	78	83	79	81	84	84	85	84	79
86	94	90	87	89	87	88	91	89	89	87	86	90
78	80	83	80	80	81	90	91	87	87	91	85	81
82	79	86	82	85	82	—	—	—	—	—	—	—
—	—	—	—	—	—	91	89	93	92	95	91	85
75	81	92	92	85	99	100	97	99	100	99	100	85
88	93	96	96	98	96	95	96	97	86	86	87	85
88	84	80	86	88	89	89	89	87	86	87	87	82
86	91	81	92	91	74	81	86	73	68	70	66	82
76	75	75	67	68	59	64	70	70	75	77	85	73
71	71	72	77	76	76	—	—	—	—	—	—	77
—	—	—	—	—	—	74	80	75	79	78	82	77
91	89	89	88	88	81	81	70	75	73	67	87	75
85	89	83	82	89	89	91	100	100	86	98	100	81
93	89	93	89	88	96	94	88	92	92	93	84	89
81	78	79	79	82	81	—	—	—	—	—	—	83
—	—	—	—	—	—	92	94	85	89	93	99	83
74	75	78	77	73	78	—	—	—	—	—	—	82
—	—	—	—	—	—	86	91	89	91	89	78	82
78	80	59	71	69	73	66	83	70	78	85	89	74
81	78	77	72	75	80	86	88	88	89	90	96	81
90	93	90	94	93	91	93	92	94	95	96	94	92
97	95	90	95	95	95	94	93	91	91	88	89	92
83	83	83	83	84	83	85	86	86	86	86	87	82
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*136	*131	*146	*145	*143	*150	*152	*164	*163	*172	*170	*171	*129
*263	*279	*278	*248	*245	*287	*256	*185	*211	*190	*174	*152	*227
*130	*133	*123	*123	*120	*106	*108	*109	*110	*114	*115	*110	*124
*132	*134	*153	*162	*163	*161	*159	*159	*162	*161	*150	*141	*147
*152	*129	*130	*135	*133	*135	—	—	—	—	—	—	148
—	—	—	—	—	—	*156	*152	*152	*152	*155	*155	148
*221	*221	*220	*226	*228	*229	*217	*215	*218	*212	*214	*214	*203
*158	*156	*154	*151	*153	*147	*145	*148	*142	*137	*147	*153	*160
*146	*152	*150	*146	*135	*144	*137	*137	*141	*141	*139	*133	*143
*154	*155	*141	*132	*133	*133	*134	*138	*133	*133	*131	*126	*149
*129	*131	*136	*131	*130	*126	*132	*109	*099	*095	*095	*092	*117
*098	*095	*097	*091	*085	*082	—	—	—	—	—	—	088
—	—	—	—	—	—	*084	*084	*087	*085	*088	*087	088
*081	*084	*089	*084	*077	*074	*075	*078	*079	*083	*070	*069	*081
*089	*088	*083	*074	*077	*072	*072	*070	*072	*071	*068	*070	*078
*112	*115	*124	*113	*117	*110	*110	*110	*110	*110	*112	*109	*105
*094	*090	*086	*102	*100	*077	*078	*082	*068	*066	*065	*061	*100
*123	*117	*113	*116	*112	*102	*119	*119	*119	*125	*126	*140	*106
*125	*122	*121	*126	*125	*125	—	—	—	—	—	—	125
—	—	—	—	—	—	*103	*108	*098	*099	*103	*101	125
*088	*082	*081	*081	*088	*086	*089	*084	*094	*089	*099	*129	*090
*096	*097	*102	*105	*114	*111	*105	*097	*069	*078	*076	*069	*093
*081	*080	*092	*098	*084	*080	*081	*082	*084	*084	*089	*101	*084
*167	*165	*166	*164	*171	*172	—	—	—	—	—	—	142
—	—	—	—	—	—	*111	*112	*102	*105	*105	*099	142
*142	*146	*154	*152	*149	*166	—	—	—	—	—	—	148
—	—	—	—	—	—	*220	*218	*213	*211	*208	*164	148
*128	*130	*090	*102	*097	*101	*099	*107	*085	*098	*103	*104	*121
*126	*133	*132	*130	*137	*150	*162	*166	*166	*179	*186	*202	*133
*192	*197	*188	*191	*186	*183	*186	*190	*197	*188	*188	*186	*139
*223	*217	*200	*212	*207	*206	*206	*203	*200	*202	*191	*193	*206
*138	*138	*137	*135	*135	*135	*135	*132	*130	*131	*129	*128	*133

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1 88	87	89	87	88	87	87	86	84	83	86	87
	2 74	76	70	74	71	71	79	80	81	81	81	78
	3 —	—	—	—	—	—	—	—	—	—	—	—
	4 78	74	73	74	71	61	73	78	84	87	91	91
	5 67	62	50	59	51	55	55	46	68	63	74	61
	6 73	73	75	74	90	74	55	55	55	59	63	65
	7 80	87	87	90	90	89	78	78	76	71	73	76
	8 75	83	77	87	81	74	75	74	75	81	80	80
	9 89	82	89	79	78	75	67	69	61	69	71	72
	10 —	—	—	—	—	—	—	—	—	—	—	—
	11 88	90	99	89	74	70	70	65	58	61	65	69
	12 68	83	76	72	69	69	66	61	63	62	72	85
	13 66	66	69	71	67	60	68	64	66	68	65	73
	14 81	87	91	91	89	92	92	82	81	83	88	88
	15 92	93	93	95	95	95	95	93	93	92	95	95
	16 82	71	64	61	63	61	80	95	69	59	59	56
	17 —	—	—	—	—	—	—	—	—	—	—	—
	18 70	71	72	72	69	60	60	65	57	53	53	60
	19 77	95	76	78	55	56	54	60	61	65	62	72
	20 43	87	83	80	67	56	60	59	58	63	57	65
	21 78	79	69	69	64	59	80	80	80	77	76	83
	22 77	75	83	75	77	65	67	65	63	49	73	77
	23 64	65	63	61	54	55	60	43	46	44	47	56
	24 —	—	—	—	—	—	—	—	—	—	—	—
	25 78	81	83	72	72	71	71	75	75	79	74	74
	26 88	92	93	89	92	95	94	90	81	82	74	71
	27 80	80	81	79	75	71	67	67	67	62	61	63
	28 95	92	90	94	79	82	87	85	89	85	87	90
	29 90	86	85	78	79	88	80	69	66	80	85	89
	30 69	72	78	74	74	63	59	68	68	69	75	81
	31 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	79	80	79	78	74	71	72	71	70	70	73	75
Tension of the Vapour. JANUARY.	1 In. .191	In. .188	In. .190	In. .183	In. .184	In. .182	In. .183	In. .179	In. .169	In. .167	In. .167	In. .167
	2 .156	.164	.147	.155	.153	.153	.175	.177	.176	.170	.168	.169
	3 —	—	—	—	—	—	—	—	—	—	—	—
	4 .155	.150	.148	.151	.146	.130	.149	.158	.168	.171	.183	.187
	5 .146	.133	.110	.123	.108	.123	.120	.106	.152	.132	.154	.126
	6 .124	.130	.129	.136	.170	.148	.108	.107	.104	.110	.119	.117
	7 .131	.135	.133	.134	.131	.128	.110	.103	.099	.098	.096	.093
	8 .055	.057	.051	.057	.055	.053	.054	.056	.057	.063	.060	.059
	9 .069	.065	.069	.066	.069	.069	.068	.076	.069	.075	.075	.071
	10 —	—	—	—	—	—	—	—	—	—	—	—
	11 .037	.046	.049	.055	.055	.055	.056	.053	.050	.055	.057	.060
	12 .056	.070	.066	.065	.066	.069	.067	.063	.066	.061	.072	.079
	13 .091	.093	.101	.107	.115	.106	.122	.126	.133	.136	.128	.137
	14 .168	.182	.193	.293	.192	.202	.211	.203	.196	.199	.204	.199
	15 .201	.203	.204	.218	.222	.226	.231	.247	.245	.231	.229	.235
	16 .174	.147	.124	.113	.117	.114	.157	.161	.109	.079	.071	.059
	17 —	—	—	—	—	—	—	—	—	—	—	—
	18 .121	.131	.134	.136	.136	.125	.121	.132	.116	.103	.100	.111
	19 .059	.066	.055	.055	.040	.043	.043	.046	.047	.049	.045	.049
	20 .052	.054	.054	.059	.060	.059	.068	.068	.068	.075	.066	.071
	21 .069	.068	.057	.058	.054	.049	.059	.059	.056	.049	.046	.048
	22 .051	.049	.053	.051	.053	.051	.052	.055	.056	.043	.066	.071
	23 .080	.084	.088	.093	.091	.100	.111	.081	.087	.083	.090	.095
	24 —	—	—	—	—	—	—	—	—	—	—	—
	25 .079	.084	.087	.084	.098	.099	.101	.107	.108	.114	.106	.102
	26 .127	.149	.173	.169	.176	.188	.187	.165	.130	.121	.108	.103
	27 .067	.067	.068	.071	.069	.066	.063	.064	.064	.057	.053	.058
	28 .054	.054	.054	.063	.064	.080	.091	.096	.105	.106	.105	.102
	29 .107	.112	.114	.110	.120	.141	.139	.128	.126	.139	.140	.140
	30 .085	.088	.083	.085	.080	.064	.061	.069	.069	.068	.070	.071
	31 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.104	.107	.105	.111	.109	.108	.112	.111	.109	.106	.107	.107

R.

9	10	11
3	4	5
83	86	87
81	81	78
—	—	—
87	91	91
63	74	61
59	63	65
71	73	76
81	80	80
69	71	72
—	—	—
61	65	69
62	72	85
68	65	73
83	88	88
92	95	95
59	59	56
—	—	—
53	53	60
65	62	72
63	57	65
77	76	83
49	73	77
44	47	56
—	—	—
79	74	74
82	74	71
62	61	63
85	87	90
80	85	89
69	75	81
—	—	—
70	73	75
In.	In.	In.
.167	.167	.167
.170	.168	.160
—	—	—
.174	.183	.187
.132	.154	.126
.110	.119	.117
.088	.096	.093
.063	.060	.059
.075	.075	.074
—	—	—
.055	.057	.060
.064	.072	.079
.136	.128	.137
.199	.204	.199
.231	.229	.235
.079	.071	.059
—	—	—
.103	.100	.111
.049	.045	.049
.075	.066	.073
.049	.046	.048
.043	.066	.071
.083	.090	.095
—	—	—
.114	.106	.102
.121	.108	.103
.057	.053	.058
.106	.105	.102
.139	.140	.140
.068	.070	.071
—	—	—
.106	.107	.107

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
89	88	87	87	90	90	94	94	87	89	86	74	87
74	73	74	72	73	73	—	—	—	—	—	—	78
—	—	—	—	—	—	95	93	84	83	86	80	81
91	92	92	96	94	87	80	73	77	73	81	74	66
64	68	65	69	69	62	72	75	81	85	78	73	67
54	67	64	69	66	63	66	68	67	70	73	77	77
68	67	69	72	55	67	73	81	85	75	75	81	79
80	78	78	77	85	85	75	79	78	77	77	77	75
70	68	71	77	72	73	—	—	—	—	—	—	77
—	—	—	—	—	—	74	92	100	60	52	72	75
76	71	81	80	79	86	—	80	89	83	80	83	77
92	79	81	79	79	82	93	82	72	83	74	73	75
76	72	76	74	78	78	72	78	79	79	76	76	72
92	95	94	92	94	90	86	93	90	90	88	94	85
95	95	95	95	94	90	88	88	87	90	84	86	92
66	69	70	73	75	77	—	—	—	—	—	—	70
—	—	—	—	—	—	77	72	69	69	71	72	69
73	90	80	87	87	86	66	59	61	69	70	76	72
75	75	77	73	74	76	76	79	83	83	76	79	73
69	69	78	80	80	84	80	82	78	84	77	78	79
95	95	85	76	81	81	83	83	85	81	79	79	79
78	77	73	72	64	70	62	65	69	69	62	63	70
63	74	76	79	83	78	—	—	—	—	—	—	67
—	—	—	—	—	—	95	84	81	80	79	75	80
78	78	79	77	85	82	85	87	92	86	89	89	80
74	73	77	69	66	73	72	76	75	74	79	81	80
66	76	81	85	83	85	85	90	100	100	100	76	78
89	88	89	94	97	89	92	83	88	89	92	91	89
89	85	93	91	89	84	79	86	75	76	76	72	83
79	79	75	75	80	83	—	—	—	—	—	—	74
—	—	—	—	—	—	73	61	63	79	86	87	—
78	78	79	80	80	80	80	80	81	80	79	78	77
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
.166	.162	.162	.160	.168	.174	.191	.189	.187	.191	.183	.156	.177
.155	.153	.151	.147	.148	.148	—	—	—	—	—	—	.155
—	—	—	—	—	—	.131	.126	.143	.150	.164	.153	.177
.187	.202	.199	.223	.226	.233	.207	.184	.181	.170	.180	.164	.133
.134	.141	.137	.142	.142	.129	.141	.142	.153	.145	.131	.123	.119
.096	.119	.112	.118	.113	.107	.110	.112	.112	.117	.122	.127	.091
.073	.068	.067	.068	.055	.060	.066	.071	.071	.068	.067	.069	.057
.060	.058	.058	.056	.058	.058	.052	.057	.058	.058	.059	.059	.064
.073	.070	.074	.076	.072	.072	—	—	—	—	—	—	.033
—	—	—	—	—	—	.049	.055	.054	.028	.025	.025	.059
.064	.058	.065	.065	.063	.068	—	.065	.072	.070	.068	.068	.075
.078	.068	.071	.071	.073	.074	.080	.084	.088	.097	.095	.098	.133
.139	.134	.137	.138	.143	.150	.146	.164	.165	.169	.160	.160	.198
.202	.203	.196	.195	.198	.193	.173	.182	.185	.188	.191	.205	.226
.243	.244	.258	.252	.249	.243	.230	.226	.214	.208	.190	.182	.100
.062	.061	.059	.060	.061	.061	—	—	—	—	—	—	.115
—	—	—	—	—	—	.095	.092	.093	.101	.106	.106	.112
.126	.146	.130	.135	.127	.118	.091	.071	.069	.070	.063	.066	.050
.050	.049	.050	.048	.048	.051	.051	.052	.053	.053	.049	.051	.068
.076	.074	.079	.078	.078	.077	.071	.071	.070	.073	.069	.069	.051
.054	.051	.048	.046	.050	.049	.050	.051	.053	.051	.051	.051	.063
.070	.066	.067	.069	.069	.076	.070	.073	.077	.076	.071	.077	.091
.100	.103	.105	.102	.101	.096	—	—	—	—	—	—	.109
—	—	—	—	—	—	.090	.084	.085	.082	.080	.075	.109
.108	.108	.114	.114	.125	.117	.117	.117	.137	.133	.133	.126	.117
.107	.097	.101	.085	.080	.089	.089	.081	.074	.073	.072	.071	.057
.049	.052	.051	.053	.049	.051	.050	.052	.055	.052	.054	.043	.089
.089	.080	.092	.095	.093	.099	.093	.090	.097	.099	.103	.105	.121
.139	.134	.138	.132	.127	.114	.101	.105	.109	.099	.100	.093	.076
.063	.060	.056	.056	.059	.062	—	—	—	—	—	—	.109
—	—	—	—	—	—	.099	.078	.080	.097	.105	.109	.107
.107	.107	.107	.107	.107	.107	.106	.103	.105	.105	.104	.102	.107

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. FEBRUARY.	1	83	85	82	84	82	90	90	89	93	88	92
	2	95	94	92	75	76	74	72	75	78	84	80
	3	99	100	98	97	97	97	97	97	98	89	81
	4	50	48	47	52	48	50	48	51	48	51	60
	5	62	62	60	54	58	52	70	59	69	70	75
	6	57	64	57	59	56	60	60	55	56	58	59
	7	—	—	—	—	—	—	—	—	—	—	—
	8	82	86	80	80	75	75	75	69	72	76	72
	9	80	79	82	71	75	77	66	70	65	68	68
	10	85	85	87	81	84	71	79	70	74	83	88
	11	73	73	70	68	72	71	67	74	65	65	63
	12	72	77	70	73	74	70	69	74	79	65	59
	13	71	65	71	75	64	65	61	60	63	63	59
	14	—	—	—	—	—	—	—	—	—	—	—
	15	81	80	75	72	73	58	63	53	58	56	58
	16	69	60	72	82	72	73	76	84	79	85	84
	17	82	82	84	78	81	81	74	77	77	76	62
	18	66	68	63	73	90	89	89	78	88	90	92
	19	74	76	77	85	82	83	78	80	88	88	87
	20	85	81	84	79	76	74	74	75	74	74	74
	21	—	—	—	—	—	—	—	—	—	—	—
	22	64	67	69	68	74	69	71	66	71	71	74
	23	79	21	29	33	36	39	51	51	45	46	53
	24	25	17	28	43	51	54	65	75	72	70	72
	25	57	53	53	60	59	55	56	55	65	64	67
	26	50	53	62	65	65	66	72	71	74	71	70
	27	89	89	91	91	95	94	96	91	96	95	95
	28	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	72	69	70	71	71	70	72	71	73	73	73	76
Tension of the Vapour. FEBRUARY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	.109	.115	.114	.120	.128	.153	.162	.166	.170	.164	.169
	2	.148	.147	.161	.152	.180	.177	.174	.185	.197	.205	.190
	3	.225	.227	.222	.217	.216	.215	.217	.220	.184	.162	.131
	4	.040	.040	.038	.044	.044	.050	.052	.063	.061	.069	.074
	5	.047	.045	.043	.042	.050	.050	.072	.066	.082	.084	.091
	6	.048	.052	.049	.056	.059	.068	.074	.079	.084	.091	.093
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.133	.135	.130	.137	.140	.151	.154	.144	.148	.158	.148
	9	.130	.120	.121	.117	.128	.139	.121	.129	.117	.121	.121
	10	.126	.126	.128	.127	.140	.128	.144	.145	.153	.163	.159
	11	.071	.072	.067	.069	.083	.084	.080	.091	.078	.078	.074
	12	.061	.070	.063	.072	.085	.089	.090	.102	.119	.088	.069
	13	.067	.062	.067	.078	.076	.084	.078	.083	.090	.090	.085
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.135	.130	.116	.106	.110	.085	.087	.071	.070	.069	.069
	16	.071	.054	.075	.084	.060	.062	.067	.102	.103	.116	.111
	17	.097	.095	.100	.107	.132	.141	.124	.132	.134	.139	.113
	18	.080	.085	.083	.106	.152	.162	.169	.155	.167	.170	.169
	19	.114	.116	.118	.127	.127	.137	.134	.139	.160	.163	.158
	20	.125	.117	.118	.104	.096	.095	.097	.095	.094	.094	.092
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.061	.064	.065	.067	.075	.078	.079	.076	.080	.082	.085
	23	.046	.042	.047	.021	.025	.030	.045	.049	.045	.047	.056
	24	.013	.008	.018	.032	.047	.060	.078	.094	.091	.089	.089
	25	.061	.054	.055	.070	.073	.075	.079	.080	.086	.094	.096
	26	.034	.040	.062	.078	.096	.102	.109	.109	.111	.103	.100
	27	.133	.133	.143	.140	.147	.152	.160	.156	.168	.165	.172
	28	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.091	.088	.091	.095	.103	.107	.110	.114	.117	.117	.113	.112

R.

9	10	11
3	4	5
88	92	91
84	80	77
89	81	76
51	60	57
70	75	77
58	59	63
—	—	—
76	72	88
68	68	67
83	88	92
65	63	70
65	59	56
63	59	60
—	—	—
56	58	93
85	84	83
76	62	78
90	92	80
88	87	88
74	74	74
—	—	—
71	74	72
46	53	68
70	72	74
64	67	70
71	70	64
95	95	95
—	—	—
73	73	76

In.	In.	In.
*164	*169	*161
*205	*190	*183
*162	*131	*110
*069	*074	*066
*084	*091	*093
*091	*093	*094
—	—	—
*158	*148	*160
*121	*121	*118
*163	*159	*150
*078	*074	*076
*088	*069	*061
*090	*085	*086
—	—	—
*069	*069	*097
*116	*111	*096
*139	*113	*131
*170	*169	*144
*163	*158	*154
*094	*092	*091
—	—	—
*082	*085	*083
*047	*056	*068
*089	*089	*089
*094	*096	*085
*103	*100	*091
*165	*172	*176
—	—	—
*117	*113	*112

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
91	94	88	82	83	86	89	92	90	89	90	95	88
79	80	79	82	91	95	94	94	90	90	95	98	85
75	66	61	68	68	59	65	65	62	60	56	49	78
58	57	69	67	64	59	58	63	62	65	64	64	57
75	62	60	59	59	64	65	67	61	62	64	64	64
75	80	75	67	69	71	—	—	—	—	—	—	—
—	—	—	—	—	—	82	85	84	79	77	83	68
90	90	95	93	91	91	95	89	89	95	96	86	85
71	68	70	77	80	81	80	78	77	74	73	85	74
91	85	84	74	77	80	81	80	77	79	78	70	81
78	77	74	76	72	80	82	80	80	79	76	73	73
57	56	55	67	65	60	51	58	63	63	67	82	66
61	63	64	64	66	68	—	—	—	—	—	—	—
—	—	—	—	—	—	98	98	95	95	90	89	72
64	58	55	57	55	54	56	52	69	70	72	75	65
77	86	86	84	80	81	78	78	77	77	80	77	78
72	73	66	72	68	72	74	78	73	73	70	70	74
85	84	84	77	77	81	81	76	75	77	74	87	80
89	88	89	89	90	86	91	91	91	87	87	85	85
74	74	78	71	68	67	—	—	—	—	—	—	—
—	—	—	—	—	—	68	69	69	67	66	66	13
70	69	60	64	47	50	47	42	37	38	30	100	62
52	51	45	56	29	34	31	15	29	22	15	16	39
74	72	74	71	66	68	70	72	65	74	70	71	62
70	66	49	53	57	47	45	53	15	42	42	60	55
73	66	70	74	76	82	86	88	86	90	90	90	73
100	98	90	80	88	93	—	—	—	—	—	—	—
—	—	—	—	—	—	84	60	67	68	71	70	87
75	73	71	72	70	71	73	72	70	71	71	76	72
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*161	*164	*159	*148	*146	*150	*155	*150	*142	*150	*153	*151	*148
*195	*199	*194	*194	*206	*209	*214	*210	*207	*208	*211	*213	*190
*098	*079	*069	*072	*067	*057	*064	*064	*057	*053	*048	*041	*130
*066	*062	*071	*066	*061	*056	*055	*056	*053	*054	*052	*051	*056
*080	*075	*070	*068	*067	*067	*066	*068	*058	*058	*056	*053	*065
*102	*099	*092	*081	*079	*082	—	—	—	—	—	—	—
—	—	—	—	—	—	*093	*121	*125	*123	*119	*122	*087
*160	*160	*164	*167	*165	*169	*173	*161	*159	*164	*168	*146	*154
*119	*112	*115	*126	*132	*127	*132	*108	*097	*088	*098	*121	*119
*145	*126	*123	*100	*087	*087	*086	*066	*060	*071	*073	*073	*116
*081	*079	*073	*074	*073	*081	*082	*079	*079	*076	*069	*058	*076
*063	*060	*058	*065	*062	*045	*041	*050	*058	*062	*069	*080	*070
*086	*082	*083	*082	*084	*087	—	—	—	—	—	—	—
—	—	—	—	—	—	*162	*161	*158	*159	*150	*146	*099
*073	*066	*063	*063	*057	*054	*056	*054	*075	*077	*077	*079	*081
*092	*107	*106	*110	*091	*087	*085	*087	*085	*085	*089	*086	*088
*118	*108	*094	*090	*076	*079	*073	*074	*071	*071	*076	*081	*102
*141	*141	*136	*123	*121	*127	*127	*129	*120	*121	*114	*135	*132
*154	*152	*151	*151	*152	*146	*147	*147	*146	*137	*135	*129	*141
*091	*091	*088	*086	*081	*080	—	—	—	—	—	—	—
—	—	—	—	—	—	*072	*071	*069	*064	*064	*062	*089
*080	*076	*061	*060	*038	*038	*034	*029	*024	*024	*019	*009	*057
*039	*032	*020	*023	*019	*019	*016	*008	*017	*013	*009	*008	*029
*086	*084	*091	*087	*079	*080	*084	*084	*075	*084	*079	*078	*071
*083	*061	*041	*045	*048	*040	*038	*043	*012	*029	*029	*046	*060
*086	*098	*104	*114	*120	*129	*135	*138	*135	*141	*141	*141	*106
*188	*184	*170	*153	*159	*161	—	—	—	—	—	—	—
—	—	—	—	—	—	*095	*069	*076	*079	*081	*078	*139
*109	*104	*100	*098	*095	*094	*095	*092	*090	*091	*091	*091	*100

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MARCH.	1	80	79	72	62	55	60	67	76	78	63	63
	2	76	82	75	74	61	56	58	67	61	63	71
	3	82	79	85	86	81	73	77	74	67	65	67
	4	85	86	88	79	68	61	62	64	69	65	70
	5	98	100	96	85	82	76	73	75	73	75	71
	6	82	84	86	69	78	66	70	70	69	69	76
	7	—	—	—	—	—	—	—	—	—	—	—
	8	84	66	67	67	70	74	67	76	74	68	59
	9	65	67	70	79	77	77	78	77	74	78	81
	10	89	88	88	78	75	65	60	54	59	61	77
	11	85	87	82	68	81	71	93	76	71	68	61
	12	92	90	88	78	56	57	56	50	51	64	68
	13	75	79	77	68	51	50	53	58	45	62	60
	14	—	—	—	—	—	—	—	—	—	—	—
	15	69	71	76	74	70	69	61	61	63	77	65
	16	82	82	78	73	68	64	61	73	67	79	84
	17	80	81	76	85	67	62	62	67	51	56	57
	18	81	78	78	75	62	49	55	60	61	63	52
	19	73	70	57	62	62	56	58	61	64	59	59
	20	78	80	82	79	86	74	72	72	74	74	83
	21	—	—	—	—	—	—	—	—	—	—	—
	22	86	85	83	86	86	86	87	76	80	83	86
	23	85	84	85	85	84	80	81	78	64	58	59
	24	77	77	77	79	70	73	67	54	58	50	60
	25	68	72	72	58	56	66	68	54	49	49	52
	26	55	66	60	68	63	69	70	66	75	64	86
	27	76	68	57	58	63	65	68	66	72	64	64
	28	—	—	—	—	—	—	—	—	—	—	—
	29	77	72	56	57	64	61	44	55	49	56	56
	30	73	69	68	65	65	58	57	56	61	70	63
	31	60	74	63	52	52	48	51	54	60	48	47
Hourly Means	78	78	76	72	69	65	66	66	64	65	67	69
Tension of the Vapour. MARCH.	1	.090	.088	.089	.083	.074	.087	.103	.122	.129	.104	.101
	2	.082	.086	.088	.093	.082	.082	.094	.114	.107	.107	.116
	3	.106	.119	.131	.140	.144	.141	.157	.143	.139	.156	.146
	4	.075	.076	.103	.111	.104	.099	.108	.115	.129	.125	.127
	5	.081	.073	.081	.090	.115	.120	.117	.125	.127	.128	.128
	6	.132	.139	.154	.136	.157	.142	.147	.145	.142	.139	.150
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.115	.096	.105	.111	.124	.149	.141	.160	.132	.123	.107
	9	.070	.072	.074	.088	.093	.093	.094	.090	.087	.093	.097
	10	.113	.115	.133	.135	.145	.132	.125	.118	.129	.136	.165
	11	.077	.080	.082	.075	.087	.084	.107	.094	.089	.085	.074
	12	.078	.077	.066	.072	.059	.062	.064	.058	.063	.084	.085
	13	.055	.057	.063	.064	.055	.060	.068	.075	.069	.092	.085
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.060	.066	.073	.076	.076	.087	.072	.078	.084	.088	.079
	16	.060	.060	.065	.067	.071	.069	.076	.082	.089	.098	.102
	17	.073	.079	.084	.112	.100	.112	.120	.127	.103	.113	.112
	18	.131	.131	.143	.146	.127	.114	.129	.141	.150	.154	.142
	19	.099	.101	.096	.108	.122	.118	.129	.132	.136	.128	.129
	20	.146	.152	.155	.159	.179	.163	.168	.168	.171	.172	.183
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.122	.129	.137	.146	.152	.156	.156	.140	.145	.149	.153
	23	.164	.167	.170	.172	.178	.180	.199	.185	.168	.150	.147
	24	.121	.125	.129	.143	.134	.148	.138	.117	.127	.118	.135
	25	.134	.139	.166	.166	.160	.178	.179	.139	.132	.133	.155
	26	.100	.116	.111	.121	.119	.135	.141	.139	.167	.140	.173
	27	.080	.069	.061	.066	.077	.084	.090	.091	.097	.090	.081
	28	—	—	—	—	—	—	—	—	—	—	—
	29	.138	.141	.125	.143	.174	.170	.127	.151	.125	.153	.122
	30	.094	.091	.101	.096	.097	.092	.089	.083	.091	.099	.088
	31	.053	.071	.065	.053	.060	.059	.068	.075	.085	.073	.071
Hourly Means	.097	.100	.106	.110	.114	.115	.119	.119	.119	.119	.120	.121

UR.

9	10	11
3	4	5
63	63	65
63	71	70
65	67	71
65	70	70
75	75	71
69	76	80
—	—	—
68	59	63
78	81	81
61	77	82
68	61	59
64	68	72
62	60	63
—	—	—
77	65	70
79	84	79
56	57	54
63	52	63
59	59	61
74	83	85
—	—	—
83	86	87
58	59	59
50	60	39
49	52	70
64	86	82
64	64	55
—	—	—
56	56	57
70	63	73
48	47	60
65	67	69
In.	In.	In.
'104	'101	'101
'107	'116	'101
'156	'140	'147
'125	'127	'124
'128	'128	'120
'139	'150	'102
—	—	—
'123	'107	'110
'093	'097	'098
'136	'165	'168
'085	'073	'060
'081	'085	'085
'092	'085	'086
—	—	—
'088	'079	'083
'098	'102	'095
'113	'112	'103
'154	'142	'165
'128	'129	'126
'172	'183	'186
—	—	—
'149	'153	'157
'150	'147	'143
'118	'135	'128
'133	'135	'173
'140	'173	'164
630	'090	'081
—	—	—
'153	'122	'116
'099	'088	'100
'073	'071	'085
'120	'120	'121

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
68	70	74	65	73	79	83	82	82	83	73	76	72	
75	75	76	77	78	59	82	76	77	80	79	81	72	
86	81	82	86	89	93	90	97	82	85	76	85	81	
69	71	68	74	82	81	83	86	90	90	93	95	77	
76	83	84	83	85	87	89	86	85	85	85	85	83	
67	65	71	78	80	79	—	—	—	—	—	—	}	
—	—	—	—	—	—	85	83	91	90	94	67		77
75	78	81	82	81	76	76	75	73	72	69	67	73	
84	91	87	89	89	88	89	88	94	85	89	89	82	
67	68	61	75	78	82	79	81	79	80	81	86	75	
70	68	70	72	80	78	90	90	92	100	99	100	80	
72	54	63	64	76	77	79	80	75	79	79	81	71	
64	60	63	67	67	70	—	—	—	—	—	—	}	
—	—	—	—	—	—	75	70	65	70	61	58		64
75	79	79	83	73	70	78	80	77	77	77	88	73	
58	60	58	62	72	79	76	82	87	79	77	67	73	
70	72	63	62	63	69	72	72	75	77	77	77	69	
59	65	52	51	65	71	75	76	79	83	82	83	67	
70	72	71	80	80	78	80	77	80	78	78	78	69	
85	85	87	78	73	72	—	—	—	—	—	—	}	
—	—	—	—	—	—	84	84	86	87	85	78		80
87	87	87	88	87	86	79	82	82	82	86	85	85	
55	67	67	66	72	72	62	71	69	70	73	75	72	
67	71	70	70	72	72	72	73	72	72	71	72	69	
86	85	68	88	89	87	86	75	71	62	56	56	68	
82	79	78	66	67	64	66	65	72	65	68	70	69	
31	42	45	51	63	67	—	—	—	—	—	—	}	
—	—	—	—	—	—	87	69	76	75	72	75		64
72	57	79	81	67	70	60	63	63	64	68	68	63	
86	88	84	77	78	82	79	82	83	78	80	78	73	
65	57	58	66	67	70	60	65	57	76	81	75	61	
71	71	71	73	76	76	78	78	78	79	78	78	73	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
'100	'100	'103	'094	'100	'106	'110	'107	'107	'101	'087	'083	'099	
'102	'102	'103	'101	'102	'074	'097	'090	'088	'090	'093	'101	'096	
'106	'146	'145	'122	'119	'104	'105	'105	'105	'115	'103	'089	'129	
'118	'114	'105	'107	'100	'091	'087	'081	'085	'077	'081	'083	'101	
'119	'112	'118	'124	'122	'121	'123	'127	'129	'131	'129	'129	'116	
'123	'122	'131	'147	'119	'116	—	—	—	—	—	—	}	
—	—	—	—	—	—	'200	'196	'176	'170	'157	'104		'149
'113	'104	'101	'095	'091	'081	'081	'080	'077	'076	'074	'072	'105	
'101	'110	'109	'118	'124	'125	'122	'113	'120	'101	'112	'112	'101	
'129	'121	'103	'101	'094	'093	'087	'090	'081	'079	'078	'077	'115	
'077	'069	'067	'063	'064	'057	'062	'061	'058	'059	'060	'059	'073	
'079	'058	'063	'061	'068	'066	'067	'067	'065	'067	'064	'063	'067	
'079	'069	'068	'071	'071	'074	—	—	—	—	—	—	}	
—	—	—	—	—	—	'109	'093	'080	'077	'060	'065		'073
'081	'079	'077	'074	'062	'060	'068	'068	'062	'062	'061	'066	'073	
'069	'069	'064	'063	'067	'070	'067	'070	'073	'066	'067	'075	'073	
'124	'125	'108	'106	'106	'115	'121	'121	'123	'124	'126	'127	'111	
'139	'141	'100	'091	'109	'113	'115	'114	'113	'119	'117	'115	'127	
'127	'120	'111	'120	'126	'131	'131	'131	'141	'143	'143	'143	'125	
'186	'186	'188	'185	'153	'146	—	—	—	—	—	—	}	
—	—	—	—	—	—	'126	'117	'117	'118	'117	'105		'156
'159	'159	'159	'159	'157	'158	'151	'155	'115	'156	'165	'165	'150	
'133	'146	'145	'143	'143	'142	'118	'130	'126	'123	'127	'128	'151	
'135	'133	'131	'127	'131	'125	'125	'128	'136	'142	'140	'140	'132	
'201	'190	'149	'190	'188	'174	'166	'151	'138	'120	'102	'100	'154	
'150	'145	'143	'116	'112	'103	'103	'097	'102	'090	'090	'167	'127	
'043	'059	'058	'062	'076	'084	—	—	—	—	—	—	}	
—	—	—	—	—	—	'157	'132	'138	'135	'135	'139		'091
'130	'099	'128	'126	'099	'103	'186	'090	'089	'090	'094	'093	'126	
'106	'108	'105	'095	'092	'097	'091	'094	'095	'082	'082	'075	'093	
'089	'066	'066	'067	'058	'059	'056	'054	'048	'055	'055	'051	'064	
'118	'113	'109	'108	'107	'104	'112	'106	'103	'103	'101	'101	'110	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. APRIL.	1 ^a	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—
	5	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	—	—	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—
	19	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	—	—	—	—	—	—	—	—	—	—	—
Tension of the Vapour. APRIL.	1 ^a	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—
	5	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	—	—	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—
	19	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	—	—	—	—	—	—	—	—	—	—	—

* No reliable observations for this month.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

[illegible][illegible]

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MAY.	1	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	85	81	75	70	69	68	57	55	58	56	59
	5	84	72	62	66	58	54	51	47	45	44	46
	6	95	82	69	63	54	50	46	48	55	52	55
	7	98	67	67	58	58	54	59	52	55	55	49
	8	74	73	64	52	54	52	52	52	46	42	42
	9	—	—	—	—	—	—	—	—	—	—	—
	10	77	68	66	62	61	67	67	69	70	70	75
	11	97	97	96	84	76	76	65	69	69	74	80
	12	96	93	82	83	81	76	77	72	71	86	82
	13	89	78	71	66	60	67	57	57	58	59	59
	14	73	61	72	61	56	63	65	65	66	68	57
	15	89	69	67	64	62	63	59	61	57	53	56
	16	—	—	—	—	—	—	—	—	—	—	—
	17	84	74	72	68	58	68	57	56	50	46	45
	18	83	74	68	74	66	56	54	56	59	57	57
	19	80	67	63	62	72	69	65	62	62	58	60
	20	73	69	58	54	48	50	50	54	54	54	56
	21	88	81	85	79	82	84	72	69	69	69	66
	22	95	94	93	90	84	77	76	80	79	80	84
	23	—	—	—	—	—	—	—	—	—	—	—
	24	96	96	94	97	97	97	94	92	94	92	84
	25	97	94	89	89	85	83	76	77	73	81	87
	26	74	74	68	61	60	63	72	67	64	63	63
	27	94	86	78	74	73	72	74	74	57	66	65
	28	79	83	84	79	72	68	68	63	63	67	68
	29	83	83	82	80	79	78	81	88	83	85	85
	30	—	—	—	—	—	—	—	—	—	—	—
	31	95	95	96	95	95	96	97	98	97	96	96
Hourly Means	87	80	76	72	69	69	66	66	65	66	66	69
Tension of the Vapour. MAY.	1	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	*199	*231	*248	*246	*272	*277	*247	*229	*222	*228	*244
	5	*184	*224	*232	*263	*261	*265	*266	*251	*238	*230	*242
	6	*237	*258	*262	*226	*249	*255	*264	*269	*291	*259	*242
	7	*255	*240	*268	*261	*271	*262	*291	*276	*307	*263	*244
	8	*246	*255	*248	*241	*243	*227	*230	*239	*252	*247	*248
	9	—	—	—	—	—	—	—	—	—	—	—
	10	*259	*271	*290	*290	*309	*337	*335	*348	*372	*373	*401
	11	*375	*375	*389	*422	*432	*442	*391	*398	*397	*423	*400
	12	*397	*403	*420	*438	*461	*465	*485	*455	*423	*458	*416
	13	*370	*367	*360	*353	*313	*292	*297	*322	*328	*342	*346
	14	*291	*306	*361	*313	*282	*305	*300	*291	*297	*323	*292
	15	*292	*304	*355	*372	*362	*396	*385	*393	*384	*371	*361
	16	—	—	—	—	—	—	—	—	—	—	—
	17	*258	*286	*319	*363	*335	*364	*326	*335	*303	*284	*279
	18	*265	*298	*329	*405	*390	*362	*374	*401	*373	*370	*374
	19	*285	*282	*301	*325	*433	*389	*373	*383	*388	*358	*369
	20	*318	*263	*258	*279	*263	*273	*270	*302	*305	*298	*300
	21	*292	*294	*308	*318	*322	*348	*351	*378	*385	*394	*343
	22	*433	*485	*457	*479	*505	*527	*513	*476	*506	*512	*480
	23	—	—	—	—	—	—	—	—	—	—	—
	24	*417	*443	*446	*447	*458	*474	*472	*501	*529	*509	*504
	25	*354	*382	*416	*470	*459	*469	*421	*470	*456	*452	*421
	26	*180	*191	*198	*205	*205	*239	*276	*265	*262	*282	*298
	27	*283	*215	*322	*312	*333	*346	*342	*322	*302	*317	*319
	28	*323	*339	*367	*360	*421	*454	*516	*485	*489	*464	*444
	29	*388	*361	*369	*446	*409	*418	*399	*423	*452	*503	*441
	30	—	—	—	—	—	—	—	—	—	—	—
	31	*320	*310	*311	*306	*290	*288	*283	*281	*279	*277	*279
Hourly Means	*298	*308	*328	*340	*345	*353	*350	*354	*356	*355	*347	*362

OUR.

9	10	11
3	4	5
—	—	—
—	—	—
—	—	—
56	59	64
44	46	—
52	55	46
55	49	53
42	42	54
—	—	—
70	75	79
74	80	85
86	82	85
59	59	58
68	57	63
53	56	59
—	—	—
46	45	43
57	57	58
58	60	65
54	56	63
69	66	66
80	80	84
—	—	—
92	81	88
81	87	88
63	63	61
66	65	67
67	68	74
85	85	87
—	—	—
96	96	96
66	66	69
In.	In.	In.
—	—	—
—	—	—
—	—	—
222	228	244
230	242	—
259	259	212
263	244	275
247	248	279
—	—	—
373	401	399
423	400	413
458	446	454
342	346	344
323	292	342
371	361	363
—	—	—
284	279	264
370	374	382
358	369	399
298	300	302
394	343	321
512	480	452
—	—	—
509	504	503
452	424	449
282	298	291
317	319	356
464	444	477
503	441	521
—	—	—
277	279	279
355	347	362

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERE.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
67	69	73	73	81	87	82	65	66	75	87	87	69
61	63	68	72	77	79	86	94	92	89	87	89	57
51	67	74	77	76	83	81	82	89	89	88	87	63
48	44	43	59	63	54	50	51	49	58	70	61	74
56	59	55	56	57	58	—	—	—	—	—	—	82
—	—	—	—	—	—	94	94	82	85	81	—	87
85	94	95	96	96	97	98	97	97	96	97	98	87
91	93	92	96	97	90	86	94	97	97	97	96	85
87	85	85	89	88	87	91	91	86	89	87	90	71
58	70	73	76	80	79	79	81	78	80	79	82	73
68	74	69	75	81	77	92	91	92	89	90	89	69
56	80	87	83	84	85	—	—	—	—	—	—	83
—	—	—	—	—	—	63	61	64	73	79	83	61
43	43	47	54	62	71	55	57	62	78	80	80	69
61	55	65	73	75	76	76	79	85	86	82	89	64
73	56	57	53	53	62	58	63	64	65	69	68	71
64	76	78	81	83	88	88	90	96	97	97	92	84
69	79	90	93	95	96	97	97	96	95	95	96	89
85	89	91	92	95	95	—	—	—	—	—	—	94
—	—	—	—	—	—	93	97	97	97	97	97	84
92	94	92	96	95	96	94	96	96	97	98	98	78
88	92	96	93	91	81	75	77	75	78	73	73	80
69	81	82	88	89	93	95	96	96	96	95	95	75
65	72	81	85	89	89	90	87	95	96	95	94	82
74	73	81	70	72	69	76	77	87	83	88	92	97
82	81	84	86	81	82	—	—	—	—	—	—	97
—	—	—	—	—	—	66	67	85	86	91	95	—
98	98	96	97	99	98	99	98	99	97	98	99	76
71	74	77	80	82	82	82	83	84	86	88	88	—
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
234	227	228	216	216	200	191	180	177	179	176	166	219
243	225	234	218	208	197	208	206	199	192	183	187	224
220	237	238	236	233	234	223	217	222	215	208	198	238
242	197	190	213	220	212	208	217	217	267	326	309	251
270	270	255	255	260	256	—	—	—	—	—	—	263
—	—	—	—	—	—	318	312	305	323	288	247	361
379	409	395	386	375	408	412	403	388	362	385	395	361
421	383	373	389	391	384	379	388	392	385	399	418	398
442	450	450	462	445	442	416	428	403	387	349	377	432
338	350	340	311	307	295	291	290	278	280	275	273	319
309	331	290	287	287	279	279	261	256	240	245	236	292
337	397	364	322	321	318	—	—	—	—	—	—	326
—	—	—	—	—	—	234	233	235	234	235	230	—
251	235	251	264	273	276	235	236	226	242	238	237	280
373	280	297	298	299	288	286	289	302	305	290	297	330
442	336	291	258	256	269	253	258	252	244	245	248	318
297	318	314	297	290	284	276	276	270	268	265	268	283
244	337	376	320	315	357	357	387	364	366	377	396	344
337	451	450	454	441	423	—	—	—	—	—	—	442
—	—	—	—	—	—	374	361	361	364	363	396	—
495	470	453	426	416	387	363	338	332	331	316	327	432
447	459	454	408	409	257	224	211	193	190	175	169	368
294	270	263	260	251	242	243	230	236	234	209	212	243
321	311	309	299	283	280	280	262	262	259	277	288	301
477	411	419	403	415	385	400	402	398	397	409	410	419
443	389	382	383	357	363	—	—	—	—	—	—	382
—	—	—	—	—	—	243	240	288	300	322	331	—
288	288	286	297	305	311	318	313	316	314	320	318	299
339	334	329	319	316	306	292	289	286	287	286	289	324

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Mean Toronto Time	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JUNE.	1	97	97	100	96	96	91	87	85	91	86	92
	2	87	85	82	76	72	69	82	81	81	79	77
	3	96	91	89	88	86	83	84	84	83	82	84
	4	90	89	83	79	74	66	52	66	61	65	65
	5	85	79	75	73	67	63	60	75	76	73	54
	6	—	—	—	—	—	—	—	—	—	—	—
	7	80	78	69	69	66	63	62	60	58	60	61
	8	81	76	75	74	75	79	81	78	77	79	82
	9	97	96	91	87	85	85	84	81	80	79	75
	10	92	91	91	96	96	94	94	94	95	96	96
	11	95	92	88	90	83	83	91	85	88	94	95
	12	84	75	83	80	72	77	70	67	67	67	67
	13	—	—	—	—	—	—	—	—	—	—	—
	14	91	89	79	90	84	79	78	89	83	74	69
	15	85	82	79	75	75	74	74	73	73	67	64
	16	74	72	65	64	62	64	64	65	64	66	63
	17	89	72	71	79	75	75	77	66	64	54	52
	18	77	72	72	70	70	65	67	77	67	65	68
	19	96	95	96	97	97	95	96	90	82	84	78
	20	—	—	—	—	—	—	—	—	—	—	—
	21	84	82	82	85	81	79	76	76	89	88	79
	22	95	94	94	87	87	86	84	81	78	87	89
	23	87	82	74	77	83	79	81	79	77	72	77
	24	89	82	81	78	76	80	72	62	64	70	66
	25	80	80	84	79	71	62	66	61	61	63	65
	26	89	78	77	77	75	78	75	78	74	77	75
	27	—	—	—	—	—	—	—	—	—	—	—
	28	82	78	67	59	59	61	63	70	46	43	59
	29	72	71	67	66	63	60	56	58	57	76	74
	30	72	71	67	63	64	64	65	69	67	69	70
Hourly Mean	86	83	80	79	77	75	74	75	73	74	72	72
Tension of the Vapour. JUNE.	1	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	'297	'297	'332	'378	'415	'475	'474	'444	'438	'402	'411
	3	'339	'336	'340	'334	'359	'369	'384	'445	'407	'407	'399
	4	'325	'395	'399	'396	'415	'454	'450	'404	'410	'391	'371
	5	'375	'391	'403	'370	'358	'354	'286	'331	'298	'286	'274
	6	'225	'232	'359	'262	'273	'286	'299	'370	'381	'394	'299
	7	—	—	—	—	—	—	—	—	—	—	—
	8	'294	'332	'376	'411	'394	'403	'412	'425	'419	'427	'401
	9	'346	'326	'324	'337	'379	'383	'382	'379	'406	'424	'408
	10	'432	'462	'498	'542	'543	'559	'573	'630	'649	'639	'632
	11	'521	'522	'540	'553	'540	'529	'541	'537	'572	'534	'538
	12	'455	'489	'526	'568	'504	'533	'505	'510	'462	'471	'459
	13	'288	'293	'385	'402	'376	'393	'382	'399	'401	'408	'427
	14	—	—	—	—	—	—	—	—	—	—	—
	15	'399	'375	'300	'326	'296	'277	'258	'259	'239	'248	'234
	16	'205	'211	'214	'217	'232	'241	'250	'275	'300	'313	'309
	17	'232	'247	'246	'256	'262	'275	'277	'273	'269	'290	'288
	18	'296	'282	'327	'393	'382	'387	'408	'409	'378	'389	'364
	19	'301	'340	'340	'367	'371	'388	'410	'472	'396	'378	'377
	20	'416	'418	'450	'489	'527	'517	'508	'498	'426	'451	'477
	21	—	—	—	—	—	—	—	—	—	—	—
	22	'375	'409	'461	'491	'488	'481	'492	'488	'442	'490	'520
	23	'378	'398	'377	'435	'470	'530	'538	'545	'529	'486	'460
	24	'400	'435	'439	'507	'528	'557	'561	'559	'543	'541	'529
	25	'409	'476	'512	'537	'570	'626	'548	'478	'505	'568	'536
	26	'409	'487	'504	'483	'435	'495	'496	'497	'497	'535	'513
	27	'509	'523	'605	'644	'655	'697	'677	'661	'639	'648	'631
	28	—	—	—	—	—	—	—	—	—	—	—
	29	'444	'437	'377	'376	'391	'397	'452	'549	'375	'360	'380
	30	'355	'371	'366	'393	'401	'414	'404	'421	'450	'506	'505
	31	'350	'398	'455	'464	'474	'453	'495	'521	'516	'502	'500
Hourly Mean	'361	'380	'401	'421	'426	'438	'441	'455	'436	'443	'433	'422

UR.

9	10	11
3	4	5
91	86	92
81	79	77
83	82	84
61	65	65
73	32	54
—	—	—
69	66	61
78	79	82
79	74	75
96	96	96
94	95	77
67	67	67
—	—	—
74	69	68
67	64	63
66	63	65
64	54	52
65	68	82
84	78	78
—	—	—
88	83	79
87	89	83
72	72	77
70	66	61
63	65	62
74	77	75
—	—	—
43	46	39
76	74	77
69	69	70
74	72	72

In.	In.	In.
'402	'411	'432
'407	'399	'449
'410	'391	'371
'286	'274	'263
'391	'299	'306
—	—	—
'427	'401	'355
'421	'408	'380
'639	'632	'579
'534	'538	'519
'471	'459	'449
'408	'427	'421
—	—	—
'248	'234	'231
'313	'309	'301
'290	'288	'293
'349	'364	'310
'378	'377	'408
'451	'477	'505
—	—	—
'490	'520	'508
'486	'460	'470
'541	'529	'502
'568	'536	'535
'535	'513	'419
'648	'631	'626
—	—	—
'360	'380	'426
'506	'505	'516
'502	'500	'485
'443	'433	'422

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	24	
6	7	8	9	10	11	12	13	14	15	16	17	18	
89	94	95	92	87	86	88	88	89	90	90	88	91	
78	81	86	89	90	96	95	98	96	96	97	95	85	
84	82	86	89	92	95	96	93	96	94	93	92	89	
64	64	64	77	76	77	81	83	80	84	81	82	74	
56	59	67	72	84	89	—	—	—	—	—	—	74	
—	—	—	—	—	—	71	73	91	95	98	92	74	
65	70	76	76	77	81	83	83	84	87	89	89	73	
83	80	84	78	82	86	93	92	96	96	97	96	83	
74	75	82	86	88	90	89	91	93	92	93	93	86	
96	96	97	97	98	97	98	96	97	97	98	97	96	
74	81	85	81	82	82	82	79	80	81	80	85	85	
70	73	80	81	81	82	—	—	—	—	—	—	80	
—	—	—	—	—	—	94	94	96	94	96	96	—	
73	74	76	71	72	71	72	72	71	71	76	81	77	
65	67	73	77	80	84	78	77	78	83	82	76	75	
70	70	70	85	91	89	88	87	88	88	90	93	75	
53	70	75	82	86	84	87	89	85	86	76	77	75	
87	93	96	97	96	96	96	96	96	96	96	96	83	
78	87	87	93	94	95	—	—	—	—	—	—	—	
—	—	—	—	—	—	94	94	91	88	90	93	90	
79	88	92	90	94	92	94	93	94	96	95	94	87	
83	86	91	91	89	91	87	87	88	90	90	90	88	
77	80	89	92	92	92	92	80	84	81	91	92	85	
64	74	76	78	78	81	84	89	90	87	90	86	78	
71	81	92	78	80	91	91	91	91	92	92	92	78	
78	84	87	84	92	88	—	—	—	—	—	—	78	
—	—	—	—	—	—	91	82	61	66	64	76	—	
62	64	55	57	55	59	61	62	62	65	86	74	62	
33	59	60	58	66	63	64	71	65	72	72	72	66	
70	77	73	80	79	71	73	76	82	83	81	75	72	
73	77	81	82	84	85	85	85	86	87	88	87	80	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
'410	'416	'396	'377	'362	'344	'342	'324	'322	'316	'336	'337	'378	
'398	'368	'361	'332	'349	'327	'316	'306	'288	'278	'282	'278	'352	
'378	'360	'363	'371	'356	'366	'379	'372	'388	'386	'377	'373	'387	
'262	'249	'233	'250	'234	'230	'224	'221	'192	'191	'180	'178	'276	
'293	'303	'291	'282	'279	'270	—	—	—	—	—	—	—	
—	—	—	—	—	—	'262	'262	'278	'278	'265	'258	'292	
'331	'327	'339	'335	'327	'349	'343	'343	'334	'347	'354	'360	'364	
'380	'370	'376	'364	'386	'387	'400	'398	'421	'390	'386	'384	'380	
'380	'592	'569	'519	'537	'565	'547	'518	'511	'505	'488	'484	'548	
'515	'495	'503	'479	'471	'468	'496	'506	'496	'496	'448	'440	'511	
'312	'303	'316	'295	'296	'301	'298	'289	'288	'288	'264	'271	'390	
'425	'390	'357	'354	'350	'340	—	—	—	—	—	—	—	
—	—	—	—	—	—	'359	'359	'356	'354	'358	'356	'372	
'241	'237	'223	'196	'189	'184	'186	'183	'182	'182	'187	'196	'243	
'302	'285	'277	'267	'262	'265	'255	'251	'256	'251	'248	'229	'259	
'302	'303	'303	'273	'278	'270	'259	'256	'251	'249	'236	'250	'248	
'326	'375	'316	'299	'280	'270	'263	'257	'238	'238	'235	'256	'321	
'410	'425	'444	'461	'454	'462	'461	'430	'431	'433	'429	'429	'409	
'497	'406	'381	'368	'351	'349	—	—	—	—	—	—	'424	
—	—	—	—	—	—	'377	'359	'357	'342	'347	'349	—	
'490	'477	'426	'406	'413	'406	'397	'369	'451	'334	'331	'359	'438	
'467	'442	'421	'407	'402	'394	'381	'381	'377	'378	'326	'346	'431	
'506	'475	'463	'453	'439	'440	'397	'346	'333	'318	'339	'314	'156	
'519	'515	'501	'400	'376	'375	'368	'365	'360	'355	'393	'369	'467	
'477	'463	'481	'412	'412	'463	'478	'494	'486	'493	'481	'455	'473	
'581	'568	'570	'576	'568	'520	—	—	—	—	—	—	—	
—	—	—	—	—	—	'613	'539	'380	'383	'370	'414	'567	
'426	'410	'338	'344	'318	'336	'333	'326	'317	'323	'373	'540	'381	
'383	'396	'344	'311	'335	'327	'298	'306	'293	'310	'305	'312	'316	
'466	'449	'384	'374	'352	'321	'313	'198	'300	'294	'287	'284	'406	
'411	'400	'384	'366	'361	'359	'359	'348	'342	'335	'332	'333	'391	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Mean Göttingen Time. (hours of mean Toronto Time.)	0	1	2	3	4	5	6	7	8	9	10	11
	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JULY.	1 63	65	62	61	69	65	66	64	57	53	53	56
	2 84	74	63	63	64	66	63	61	61	60	59	61
	3 83	76	77	68	64	61	53	56	58	57	59	67
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 90	76	68	70	64	63	65	61	60	62	55	79
	6 76	86	87	82	79	77	72	70	85	83	86	77
	7 88	83	81	71	70	74	69	69	67	68	65	74
	8 89	87	77	77	68	71	72	72	76	74	72	74
	9 88	81	78	75	72	71	68	68	71	69	69	67
	10 79	85	79	76	76	76	70	66	60	60	59	64
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 89	82	81	82	81	79	75	85	81	74	65	72
	13 72	74	73	74	63	60	60	58	62	63	60	63
	14 73	64	58	50	47	49	47	52	54	51	57	57
	15 91	87	80	72	72	69	69	68	65	64	70	72
	16 88	80	75	69	67	64	59	61	74	64	66	70
	17 90	86	86	76	69	68	67	65	68	89	89	87
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 92	84	84	82	77	70	69	69	71	70	66	66
	20 90	84	78	81	81	82	81	89	86	81	86	82
	21 98	97	94	92	86	79	75	79	75	76	71	76
	22 92	74	75	64	58	55	55	58	48	50	50	50
	23 87	84	80	76	75	73	71	66	67	65	66	69
	24 92	89	87	83	84	87	89	90	84	85	82	80
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 91	92	86	76	81	76	75	78	56	56	54	48
	27 78	72	66	64	66	64	66	69	64	64	62	67
	28 85	77	64	64	73	66	63	67	62	61	62	58
	29 88	84	79	75	72	70	69	69	74	81	74	76
	30 95	91	88	89	79	81	78	90	92	87	83	82
	31 95	90	79	79	76	76	71	76	72	71	65	63
	Aug. 1 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	86	82	77	74	72	70	68	69	69	68	67	69
Tension of the Vapour. JULY.	1 In. .290	Inc. .340	In. .373	In. .431	In. .540	In. .510	In. .540	In. .537	In. .511	In. .454	In. .452	In. .471
	2 .383	.427	.449	.555	.546	.544	.555	.576	.570	.574	.579	.588
	3 .337	.499	.614	.598	.613	.605	.561	.588	.608	.590	.613	.627
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 .480	.495	.519	.642	.633	.614	.646	.632	.623	.647	.519	.568
	6 .493	.561	.562	.571	.582	.614	.620	.665	.762	.734	.820	.762
	7 .532	.546	.562	.620	.631	.693	.683	.683	.689	.700	.668	.726
	8 .585	.610	.681	.712	.669	.725	.725	.726	.700	.687	.664	.687
	9 .575	.625	.676	.696	.683	.738	.693	.698	.695	.677	.629	.660
	10 .546	.597	.598	.618	.634	.664	.626	.642	.630	.606	.594	.589
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 .607	.682	.708	.730	.748	.774	.734	.832	.841	.786	.710	.701
	13 .554	.636	.615	.719	.676	.657	.662	.643	.611	.576	.548	.514
	14 .340	.343	.352	.347	.342	.384	.377	.428	.419	.386	.413	.441
	15 .383	.420	.457	.436	.525	.545	.584	.598	.580	.585	.591	.590
	16 .535	.579	.611	.622	.657	.657	.636	.670	.667	.641	.657	.629
	17 .638	.641	.659	.707	.741	.745	.772	.729	.776	.749	.792	.806
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 .693	.762	.829	.814	.836	.843	.856	.802	.756	.812	.791	.775
	20 .665	.718	.712	.750	.788	.745	.785	.719	.796	.818	.758	.732
	21 .671	.733	.702	.724	.762	.774	.743	.765	.781	.735	.713	.707
	22 .619	.566	.569	.501	.484	.473	.502	.544	.462	.473	.469	.469
	23 .352	.417	.482	.426	.525	.529	.522	.492	.477	.510	.544	.545
	24 .413	.496	.557	.569	.548	.566	.570	.661	.567	.597	.568	.533
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 .421	.407	.375	.331	.345	.335	.332	.384	.303	.302	.303	.271
	27 .287	.303	.311	.342	.354	.359	.381	.389	.357	.357	.371	.399
	28 .309	.317	.353	.376	.439	.394	.363	.411	.375	.368	.379	.348
	29 .411	.455	.469	.483	.487	.503	.502	.492	.511	.577	.509	.505
	30 .414	.452	.454	.456	.498	.471	.469	.491	.526	.529	.515	.514
	31 .354	.460	.470	.495	.509	.510	.523	.490	.478	.472	.469	.480
	Aug. 1 —	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.480	.524	.546	.572	.578	.592	.591	.603	.595	.590	.579	.569

UR.

9	10	11
3	4	5
53	53	56
60	59	61
57	59	67
—	—	—
62	55	79
83	86	77
68	65	74
74	72	74
69	69	67
60	59	64
—	—	—
74	65	72
63	60	63
51	57	67
64	70	72
60	66	69
89	89	87
—	—	—
70	66	66
81	86	82
76	71	76
50	50	50
65	66	69
85	82	80
—	—	—
56	54	48
64	62	67
61	62	58
81	74	76
87	83	82
71	65	63
—	—	—
68	67	69
In.	In.	In.
'454	'452	'474
'574	'579	'588
'590	'613	'657
—	—	—
'647	'519	'568
'734	'820	'652
'700	'668	'726
'687	'664	'687
'677	'629	'600
'606	'594	'580
—	—	—
'786	'710	'701
'576	'548	'514
'386	'413	'411
'585	'591	'509
'641	'657	'639
'749	'792	'803
—	—	—
'812	'791	'775
'818	'758	'732
'735	'713	'707
'473	'469	'469
'510	'544	'545
'597	'568	'533
—	—	—
'302	'303	'271
'357	'371	'399
'368	'379	'348
'577	'509	'505
'529	'515	'514
'472	'469	'409
—	—	—
'590	'579	'569

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
54	63	75	72	71	67	63	66	66	72	81	83	65
69	72	76	77	76	80	86	86	91	91	89	90	73
68	73	86	83	83	81	—	—	—	—	—	—	—
—	—	—	—	—	—	81	82	82	88	89	92	74
80	81	92	89	89	76	77	82	75	77	75	75	74
84	85	87	92	94	94	93	94	94	91	88	87	85
72	77	88	90	92	89	90	91	93	94	93	93	81
71	84	85	84	78	83	81	81	81	84	84	84	79
71	75	78	75	78	77	77	79	83	85	84	82	76
69	70	73	74	74	75	—	—	—	—	—	—	—
—	—	—	—	—	—	96	94	96	96	94	96	77
74	74	85	90	89	89	87	88	92	92	84	72	82
64	64	67	72	75	78	79	78	74	73	74	74	69
67	76	80	84	80	80	86	87	86	88	92	92	69
81	85	87	88	88	89	89	94	92	90	92	92	81
70	80	81	87	89	90	89	92	92	92	94	93	78
93	95	94	96	96	97	—	—	—	—	—	—	—
—	—	—	—	—	—	92	89	92	96	96	97	86
66	66	72	75	81	86	89	92	92	92	92	92	79
92	94	98	97	97	97	98	98	96	97	97	97	90
77	80	83	85	90	94	90	94	96	97	89	94	86
51	58	64	80	77	79	90	90	91	91	94	95	70
66	74	88	91	89	92	92	92	92	91	94	94	81
81	83	87	87	87	88	—	—	—	—	—	—	—
—	—	—	—	—	—	97	93	92	90	87	84	87
55	59	76	75	84	84	84	82	80	83	88	69	75
69	77	86	90	91	90	91	91	92	94	100	93	78
55	69	77	84	86	90	90	92	92	93	95	96	76
75	74	73	86	94	95	96	92	90	95	95	96	82
85	91	94	95	95	93	93	96	100	97	95	95	90
78	75	82	92	93	94	—	—	—	—	—	—	—
—	—	—	—	—	—	86	86	87	90	92	94	82
—	—	—	—	—	—	—	—	—	—	—	—	—
72	76	82	85	86	86	87	88	88	90	90	89	79
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'444	'443	'425	'376	'349	'334	'319	'319	'333	'341	'351	'338	'409
'617	'528	'488	'456	'434	'335	'418	'410	'410	'405	'377	'382	'484
'634	'401	'552	'460	'421	'409	—	—	—	—	—	—	—
—	—	—	—	—	—	'415	'409	'400	'408	'407	'415	'509
'584	'580	'611	'588	'573	'518	'529	'520	'494	'499	'487	'483	'562
'643	'622	'562	'553	'540	'535	'545	'519	'501	'509	'489	'493	'581
'647	'638	'602	'573	'564	'551	'567	'549	'511	'508	'524	'524	'604
'657	'707	'642	'595	'561	'376	'568	'553	'554	'533	'521	'527	'634
'618	'614	'582	'570	'563	'541	'549	'546	'575	'577	'563	'561	'619
'599	'557	'577	'570	'570	'561	—	—	—	—	—	—	—
—	—	—	—	—	—	'620	'600	'582	'582	'575	'574	'596
'746	'713	'682	'649	'609	'607	'606	'597	'593	'528	'512	'523	'676
'487	'440	'421	'416	'408	'405	'401	'386	'356	'342	'330	'325	'507
'464	'442	'409	'389	'356	'343	'338	'337	'329	'327	'355	'348	'374
'589	'589	'585	'588	'593	'559	'556	'485	'482	'463	'460	'456	'528
'593	'669	'603	'600	'603	'597	'599	'611	'610	'578	'579	'601	'617
'851	'863	'769	'751	'761	'757	—	—	—	—	—	—	—
—	—	—	—	—	—	'658	'599	'636	'620	'610	'615	'718
'747	'644	'610	'592	'602	'628	'642	'616	'618	'622	'621	'612	'713
'705	'703	'692	'697	'697	'687	'683	'673	'647	'671	'648	'649	'714
'661	'628	'608	'573	'587	'579	'579	'594	'590	'617	'606	'635	'669
'440	'428	'417	'443	'393	'375	'377	'352	'346	'333	'319	'321	'446
'525	'494	'441	'421	'408	'400	'401	'392	'378	'377	'383	'383	'456
'527	'522	'573	'533	'544	'553	—	—	—	—	—	—	—
—	—	—	—	—	—	'588	'629	'633	'593	'460	'415	'552
'280	'281	'317	'292	'287	'269	'267	'263	'253	'256	'248	'220	'306
'401	'390	'358	'343	'336	'308	'303	'307	'294	'297	'298	'281	'339
'305	'364	'359	'344	'341	'315	'345	'359	'359	'345	'332	'326	'358
'498	'479	'465	'493	'525	'513	'498	'455	'439	'415	'407	'403	'479
'520	'506	'475	'474	'447	'424	'413	'378	'394	'348	'322	'321	'460
'447	'378	'434	'431	'410	'394	—	—	—	—	—	—	—
—	—	—	—	—	—	'377	'372	'364	'346	'341	'344	'428
'564	'542	'528	'510	'499	'485	'487	'476	'470	'461	'449	'447	'531

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. AUGUST.	2	93	89	74	78	72	70	68	70	69	65	73
	3	87	78	68	69	65	63	65	63	61	58	64
	4	84	77	78	75	68	68	66	64	63	64	60
	5	84	77	77	80	77	69	71	71	65	61	66
	6	87	79	66	66	67	67	68	68	61	69	64
	7	79	77	70	66	71	70	68	69	70	67	77
	8	—	—	—	—	—	—	—	—	—	—	—
	9	96	96	97	94	93	89	86	84	83	82	81
	10	97	97	97	90	86	82	79	80	78	77	81
	11	98	97	92	96	94	98	91	88	88	92	88
	12	97	94	97	88	84	80	78	82	79	79	75
	13	96	93	67	65	82	83	73	73	74	78	79
	14	97	97	92	87	84	85	83	81	86	82	84
	15	—	—	—	—	—	—	—	—	—	—	—
	16	96	91	85	76	67	75	75	74	67	65	71
	17	97	94	93	90	89	92	96	91	82	92	91
	18	85	89	79	71	65	61	56	60	53	55	55
	19	91	84	76	61	58	53	51	48	50	49	48
	20	87	81	83	66	63	73	64	57	58	69	69
	21	74	70	71	64	52	49	47	46	45	45	41
	22	—	—	—	—	—	—	—	—	—	—	—
	23	83	78	72	69	70	74	75	77	78	84	77
	24	88	86	81	82	73	67	69	66	62	59	59
	25	79	82	78	75	74	75	67	65	64	60	61
	26	94	92	89	83	83	85	80	79	75	75	71
	27	91	88	78	78	69	65	61	60	69	76	74
	28	93	87	82	84	78	67	68	61	62	62	67
	29	—	—	—	—	—	—	—	—	—	—	—
	30	96	92	88	83	76	75	69	70	70	72	72
	31	95	91	85	71	72	67	67	64	63	68	74
Hourly Means	90	87	81	77	74	73	71	70	68	69	70	72
Tension of the Vapour. AUGUST.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	'359	'439	'447	'491	'498	'512	'507	'539	'502	'512	'562
	3	'373	'342	'421	'484	'465	'455	'473	'462	'447	'447	'501
	4	'419	'472	'551	'534	'500	'532	'531	'519	'548	'558	'535
	5	'437	'472	'532	'585	'574	'536	'555	'559	'541	'490	'514
	6	'486	'490	'494	'536	'618	'613	'620	'605	'568	'615	'542
	7	'391	'387	'408	'425	'481	'544	'539	'540	'519	'498	'545
	8	—	—	—	—	—	—	—	—	—	—	—
	9	'540	'549	'565	'587	'592	'607	'633	'663	'661	'679	'654
	10	'577	'610	'638	'677	'719	'716	'699	'709	'712	'675	'685
	11	'612	'625	'650	'643	'642	'698	'694	'698	'648	'594	'606
	12	'449	'469	'561	'602	'674	'668	'662	'682	'673	'664	'574
	13	'549	'592	'622	'606	'669	'684	'634	'623	'670	'635	'646
	14	'610	'663	'689	'712	'762	'759	'770	'790	'743	'783	'735
	15	—	—	—	—	—	—	—	—	—	—	—
	16	'634	'674	'683	'671	'625	'759	'747	'745	'709	'705	'650
	17	'579	'727	'745	'748	'763	'707	'741	'670	'669	'682	'656
	18	'376	'410	'390	'377	'365	'349	'347	'377	'346	'364	'329
	19	'281	'300	'326	'288	'302	'293	'286	'278	'289	'305	'292
	20	'358	'395	'437	'408	'426	'467	'463	'413	'421	'351	'478
	21	'315	'322	'359	'372	'331	'331	'335	'341	'353	'358	'330
	22	—	—	—	—	—	—	—	—	—	—	—
	23	'332	'382	'408	'412	'392	'433	'466	'498	'510	'557	'510
	24	'348	'395	'419	'485	'471	'468	'499	'468	'449	'428	'427
	25	'322	'377	'478	'511	'527	'528	'479	'462	'465	'444	'426
	26	'377	'438	'500	'539	'560	'644	'690	'635	'607	'622	'591
	27	'397	'399	'380	'392	'387	'373	'370	'374	'416	'434	'435
	28	'381	'358	'341	'483	'489	'439	'452	'411	'429	'413	'446
	29	—	—	—	—	—	—	—	—	—	—	—
	30	'463	'543	'546	'580	'569	'572	'541	'557	'544	'523	'490
	31	'547	'575	'382	'324	'348	'333	'346	'346	'340	'381	'394
Hourly Means	'432	'469	'499	'518	'529	'539	'538	'537	'530	'528	'521	'521

R.

9	10	11
3	4	5
65	73	69
58	64	64
64	60	60
61	66	66
69	64	71
67	77	76
—	—	—
82	81	80
77	81	82
92	88	84
79	75	74
78	79	81
82	84	81
—	—	—
65	71	69
92	91	91
55	55	60
49	48	45
69	69	84
45	41	47
—	—	—
84	77	77
59	59	61
60	61	64
75	71	77
76	74	74
62	67	70
—	—	—
72	72	83
68	74	75
69	70	72

In.	In.	In.
*512	*562	*480
*447	*501	*521
*558	*535	*527
*490	*514	*507
*615	*542	*508
*498	*545	*520
—	—	—
*679	*654	*641
*675	*685	*673
*594	*606	*585
*664	*574	*601
*635	*646	*649
*783	*735	*729
—	—	—
*705	*650	*749
*682	*656	*674
*364	*329	*312
*305	*292	*275
*351	*478	*435
*358	*330	*382
—	—	—
*557	*510	*507
*428	*427	*442
*444	*426	*432
*622	*591	*558
*434	*435	*451
*413	*446	*475
—	—	—
*523	*490	*522
*381	*394	*384
*528	*521	*521

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
63	74	82	80	80	76	77	79	81	85	90	94	77
62	68	82	86	89	91	84	88	91	92	93	91	76
64	73	86	87	87	87	88	92	91	92	93	93	78
73	78	81	83	79	81	84	87	91	92	93	94	78
90	91	83	83	82	82	90	91	95	98	97	96	80
82	86	83	82	83	84	—	—	—	—	—	—	—
—	—	—	—	—	—	95	96	95	95	96	95	81
85	85	90	90	92	94	98	95	98	96	96	96	91
89	90	89	93	94	96	97	98	97	96	97	98	90
83	90	92	96	95	96	96	96	97	96	96	96	93
81	88	91	94	94	96	93	93	93	95	95	96	88
93	95	96	94	92	93	94	92	95	96	97	97	86
79	81	89	93	93	97	—	—	—	—	—	—	90
—	—	—	—	—	—	97	97	96	97	97	98	—
72	78	85	90	93	94	97	95	96	96	97	97	83
95	93	93	93	85	88	86	92	92	92	83	84	91
64	69	73	78	78	84	88	84	86	93	95	98	74
34	72	76	64	73	72	75	78	84	88	85	88	68
89	88	84	83	88	91	91	91	90	87	83	78	79
50	64	76	77	77	81	—	—	—	—	—	—	65
—	—	—	—	—	—	74	80	81	85	87	86	—
76	88	91	91	94	93	93	93	88	90	94	95	83
67	80	78	79	85	86	82	85	81	82	81	84	76
67	77	84	87	89	92	92	87	89	91	91	91	78
79	83	84	84	77	85	91	94	96	91	90	86	84
75	81	91	92	93	95	90	90	92	93	94	92	82
75	85	87	93	95	94	—	—	—	—	—	—	83
—	—	—	—	—	—	94	95	95	94	96	97	—
93	96	97	89	91	88	85	85	84	95	94	95	85
81	85	91	92	90	94	95	89	94	92	88	89	82
76	82	86	87	87	89	89	90	91	92	92	92	82
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*478	*485	*446	*415	*499	*356	*350	*313	*320	*332	*316	*318	*433
*501	*477	*449	*404	*377	*381	*366	*363	*357	*356	*346	*346	*421
*541	*549	*495	*437	*419	*418	*416	*411	*402	*408	*406	*420	*481
*502	*502	*486	*470	*458	*456	*474	*494	*504	*505	*505	*489	*506
*520	*538	*533	*523	*527	*520	*574	*559	*551	*515	*468	*441	*540
*533	*509	*472	*445	*456	*448	—	—	—	—	—	—	—
—	—	—	—	—	—	*517	*525	*519	*517	*515	*523	*491
*639	*604	*603	*607	*616	*600	*585	*556	*532	*530	*539	*555	*599
*644	*634	*625	*634	*624	*626	*592	*584	*578	*597	*612	*644	—
*608	*567	*543	*521	*500	*493	*480	*476	*478	*480	*450	*442	*573
*623	*594	*603	*603	*604	*582	*578	*566	*524	*528	*532	*592	—
*721	*682	*669	*646	*598	*596	*588	*611	*616	*614	*605	*614	*631
*665	*657	*641	*630	*611	*617	—	—	—	—	—	—	—
—	—	—	—	—	—	*607	*589	*579	*561	*556	*567	*668
*744	*678	*639	*626	*601	*591	*589	*567	*572	*563	*574	*544	*652
*651	*619	*580	*567	*473	*472	*425	*416	*392	*408	*400	*373	*589
*314	*308	*303	*301	*293	*294	*295	*278	*286	*307	*312	*271	*329
*318	*366	*341	*277	*316	*312	*329	*322	*317	*317	*317	*334	*308
*453	*427	*405	*393	*402	*389	*393	*375	*369	*349	*326	*305	*402
*375	*402	*377	*364	*356	*351	—	—	—	—	—	—	—
—	—	—	—	—	—	*303	*316	*310	*315	*317	*318	*343
*479	*454	*415	*402	*388	*368	*353	*355	*346	*332	*327	*327	*416
*464	*429	*380	*364	*360	*365	*354	*355	*336	*339	*318	*329	*404
*428	*418	*402	*402	*402	*407	*398	*369	*365	*366	*367	*349	*422
*546	*518	*506	*508	*491	*535	*526	*525	*545	*486	*463	*389	*529
*439	*395	*436	*408	*389	*376	*357	*347	*322	*301	*309	*315	*384
*459	*433	*420	*417	*421	*401	—	—	—	—	—	—	—
—	—	—	—	—	—	*463	*441	*417	*408	*415	*417	*423
*538	*519	*483	*462	*450	*413	*385	*376	*359	*337	*328	*332	*476
*392	*358	*340	*319	*306	*315	*308	*287	*283	*306	*300	*323	*339
*523	*505	*484	*467	*456	*450	*448	*438	*433	*426	*420	*415	*484

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. SEPTEMBER.	1	89	87	88	82	79	77	79	81	67	66	69
	2	97	93	90	84	80	77	72	70	73	74	80
	3	96	97	95	94	84	81	81	70	77	83	78
	4	86	85	85	87	86	86	88	91	88	88	88
	5	—	—	—	—	—	—	—	—	—	—	—
	6	93	91	84	82	84	86	86	89	77	75	74
	7	96	91	84	75	72	72	76	80	83	82	83
	8	89	89	87	86	81	78	78	74	80	81	82
	9	94	92	90	79	71	65	63	72	73	74	74
	10	89	95	76	77	72	70	71	64	67	69	73
	11	97	92	91	83	82	76	74	74	71	62	63
	12	—	—	—	—	—	—	—	—	—	—	—
	13	89	85	84	77	76	72	73	74	69	73	73
	14	88	86	82	82	80	78	76	77	64	63	72
	15	93	88	79	68	66	62	60	57	71	70	69
	16	97	95	85	78	74	74	75	76	78	76	76
	17	93	89	85	80	83	78	77	76	76	73	73
	18	92	94	93	93	91	92	92	94	91	84	85
	19	—	—	—	—	—	—	—	—	—	—	—
	20	91	91	91	89	87	90	90	91	91	87	92
	21	94	93	86	82	76	79	73	67	67	64	71
	22	95	95	88	74	83	82	81	75	72	70	81
	23	98	97	89	87	83	78	79	83	78	74	81
	24	89	90	90	89	90	89	86	87	87	90	92
	25	87	89	90	86	85	84	82	77	85	87	90
	26	—	—	—	—	—	—	—	—	—	—	—
	27	96	95	95	96	96	95	92	94	84	81	84
	28	91	93	86	74	66	62	59	80	64	63	76
	29	92	88	80	75	78	71	70	79	76	91	89
	30	90	88	85	81	72	68	72	66	69	72	79
Hourly Means	92	91	87	82	80	78	77	78	76	76	77	80
Tension of the Vapour. SEPTEMBER.	1	In. '334	In. '342	In. '392	In. '400	In. '435	In. '445	In. '454	In. '467	In. '419	In. '411	In. '424
	2	'336	'398	'468	'500	'524	'527	'305	'499	'532	'554	'568
	3	'442	'534	'552	'550	'605	'644	'645	'562	'637	'619	'597
	4	'378	'377	'374	'290	'592	'398	'402	'416	'412	'420	'417
	5	—	—	—	—	—	—	—	—	—	—	—
	6	'321	'343	'371	'449	'474	'488	'485	'507	'476	'489	'455
	7	'376	'453	'480	'449	'437	'436	'446	'475	'466	'465	'464
	8	'538	'556	'581	'597	'642	'642	'652	'617	'651	'635	'636
	9	'537	'330	'334	'307	'307	'295	'290	'369	'376	'379	'378
	10	'267	'334	'29	'393	'387	'381	'406	'361	'389	'393	'414
	11	'308	'351	'398	'446	'431	'430	'401	'405	'384	'331	'330
	12	—	—	—	—	—	—	—	—	—	—	—
	13	'368	'344	'325	'321	'319	'303	'312	'314	'472	'277	'262
	14	'260	'260	'257	'265	'270	'261	'262	'265	'253	'251	'284
	15	'210	'239	'245	'242	'252	'255	'255	'258	'323	'325	'324
	16	'222	'265	'309	'311	'343	'352	'362	'367	'385	'377	'378
	17	'336	'334	'378	'401	'441	'431	'424	'418	'394	'399	'379
	18	'421	'444	'464	'469	'482	'481	'491	'493	'483	'478	'440
	19	—	—	—	—	—	—	—	—	—	—	—
	20	'385	'393	'402	'399	'394	'405	'408	'415	'406	'408	'389
	21	'352	'375	'383	'387	'381	'399	'401	'369	'369	'344	'337
	22	'279	'315	'342	'323	'410	'405	'400	'372	'359	'346	'379
	23	'345	'379	'433	'460	'464	'484	'485	'508	'506	'479	'495
	24	'368	'369	'365	'375	'368	'364	'384	'384	'381	'479	'389
	25	'297	'307	'320	'337	'360	'376	'403	'349	'390	'387	'384
	26	—	—	—	—	—	—	—	—	—	—	—
	27	'452	'470	'482	'495	'528	'555	'576	'593	'557	'555	'558
	28	'289	'320	'338	'313	'304	'304	'299	'310	'273	'262	'261
	29	'258	'255	'264	'279	'322	'259	'289	'326	'256	'287	'302
	30	'217	'234	'251	'275	'279	'271	'301	'277	'261	'273	'285
Hourly Means	'334	'359	'379	'385	'414	'407	'405	'411	'416	'409	'405	'408

JR.

9	10	11
3	4	5

66	69	74
73	74	80
78	83	78
88	87	88
—	—	—
75	74	75
82	83	85
81	82	92
74	74	77
69	73	74
62	63	67
—	—	—
73	73	77
63	72	62
70	69	72
76	76	76
76	73	73
91	84	85
—	—	—
91	87	92
64	67	71
70	75	81
74	77	81
96	90	92
87	89	90
—	—	—
81	81	84
63	68	76
91	90	89
72	72	79
—	—	—
76	77	80

In.	In.	In.
*411	*424	*431
*554	*568	*561
*619	*597	*478
*420	*417	*425
—	—	—
*489	*455	*556
*465	*464	*475
*635	*636	*679
*379	*378	*379
*393	*414	*413
*331	*330	*341
—	—	—
*277	*262	*268
*251	*284	*233
*325	*324	*337
*377	*378	*361
*399	*379	*366
*478	*440	*428
—	—	—
*408	*389	*418
*344	*337	*337
*346	*379	*389
*479	*495	*502
*479	*389	*392
*387	*384	*390
—	—	—
*555	*558	*542
*262	*261	*282
*287	*302	*303
*273	*283	*298
—	—	—
*409	*405	*408

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
80	88	86	90	90	92	92	92	95	95	95	95	85
80	83	88	95	95	97	97	96	96	96	96	96	87
82	81	81	82	84	89	88	86	85	85	86	87	85
87	87	87	89	89	97	—	—	—	—	—	—	95
—	—	—	—	—	—	90	90	93	91	94	91	88
78	88	92	95	95	96	96	96	96	95	95	94	85
86	84	85	88	86	89	88	88	88	89	89	89	88
94	98	97	99	94	90	90	91	93	85	85	89	88
76	78	83	84	94	95	95	95	94	94	94	97	83
78	91	95	92	94	94	94	95	95	95	94	94	84
73	86	88	89	90	91	—	—	—	—	—	—	84
—	—	—	—	—	—	89	91	94	96	97	93	81
79	80	80	80	80	82	83	85	88	89	94	90	80
62	74	78	83	84	88	87	91	91	91	94	91	80
84	91	89	78	82	85	88	92	93	95	94	95	87
81	91	94	95	94	91	94	95	95	95	96	95	83
75	75	75	79	85	87	90	98	93	92	93	93	91
84	88	91	91	92	91	—	—	—	—	—	—	92
—	—	—	—	—	—	89	91	93	92	92	92	91
93	92	89	90	90	91	91	90	92	91	90	92	91
73	81	84	83	88	89	91	93	94	94	93	94	82
91	93	95	95	97	95	99	96	94	94	96	96	88
87	88	96	98	97	97	94	91	91	89	89	89	88
94	96	94	90	94	93	94	95	95	92	88	88	91
91	92	95	94	94	87	—	—	—	—	—	—	90
—	—	—	—	—	—	97	98	96	98	94	97	88
89	92	91	77	78	75	77	87	89	93	91	91	82
79	83	85	90	92	97	94	94	95	91	91	90	86
85	86	90	89	90	88	88	89	94	90	94	90	80
79	88	88	82	84	80	85	81	81	88	91	88	80
—	—	—	—	—	—	—	—	—	—	—	—	—
82	87	88	88	90	90	91	92	92	92	92	92	85
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*464	*422	*386	*382	*375	*376	*368	*351	*350	*356	*350	*332	*393
*533	*501	*535	*553	*509	*483	*468	*425	*421	*397	*418	*413	*476
*445	*406	*395	*400	*401	*395	*385	*375	*382	*382	*384	*387	*483
*430	*431	*447	*461	*464	*482	—	—	—	—	—	—	*394
—	—	—	—	—	*318	*310	*309	*303	*308	*308	*303	*426
*445	*447	*427	*433	*430	*405	*405	*385	*376	*360	*356	*354	*472
*457	*457	*452	*492	*498	*501	*503	*506	*502	*510	*513	*521	*536
*626	*614	*603	*612	*452	*387	*384	*369	*375	*374	*323	*312	*326
*372	*360	*374	*334	*334	*313	*290	*276	*275	*269	*266	*270	*351
*400	*372	*353	*336	*330	*320	*318	*319	*311	*303	*294	*297	*372
*357	*335	*324	*327	*326	*325	—	*395	*397	*395	*398	*404	*287
—	—	—	—	—	—	—	*241	*246	*254	*258	*270	*242
*262	*257	*247	*241	*236	*242	*230	*223	*218	*214	*215	*210	*271
*226	*226	*227	*230	*234	*236	*269	*253	*237	*231	*222	*223	*332
*365	*317	*297	*272	*273	*272	*328	*327	*327	*322	*335	*338	*39.
*351	*332	*323	*310	*316	*317	*378	*470	*440	*431	*432	*429	*440
*359	*359	*359	*379	*372	*375	—	—	—	—	—	—	*382
*417	*453	*457	*446	*445	*450	—	—	—	—	—	—	*387
—	—	—	—	—	—	*378	*378	*389	*392	*387	*387	*361
*403	*364	*360	*357	*353	*346	*360	*364	*351	*369	*369	*361	*329
*312	*309	*296	*293	*296	*297	*289	*273	*266	*274	*274	*274	*340
*369	*353	*340	*330	*350	*322	*319	*297	*289	*286	*300	*292	*446
*478	*461	*477	*464	*438	*428	*452	*414	*408	*392	*379	*368	*374
*397	*398	*395	*382	*388	*373	*371	*372	*363	*330	*306	*298	—
*383	*385	*389	*380	*377	*347	—	—	—	—	—	—	*382
—	—	—	—	—	—	*331	*453	*454	*467	*452	*447	*449
*530	*505	*492	*396	*376	*329	*301	*308	*301	*293	*288	*284	*277
*276	*280	*269	*244	*269	*265	*250	*248	*247	*250	*252	*252	*268
*279	*274	*279	*260	*259	*260	*260	*247	*238	*234	*218	*217	*273
*292	*270	*263	*245	*260	*262	*291	*287	*296	*304	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
*393	*380	*376	*368	*360	*350	*341	*341	*338	*334	*331	*327	*374

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean English Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. OCTOBER.	1	91	86	77	69	65	64	67	62	64	58	62
	2	91	89	85	69	68	62	59	60	70	72	78
	3	—	—	—	—	—	—	—	—	—	—	—
	4	97	97	96	91	88	86	81	81	80	78	85
	5	96	96	96	92	94	96	89	89	87	84	87
	6	91	92	94	95	95	93	92	91	87	83	86
	7	92	94	93	92	88	88	93	91	95	93	94
	8	96	96	96	94	92	89	89	95	94	96	84
	9	89	90	87	74	73	72	73	85	81	78	85
	10	—	—	—	—	—	—	—	—	—	—	—
	11	74	76	70	57	51	48	43	45	46	48	59
	12	83	85	88	88	85	78	85	82	89	87	92
	13	85	87	81	75	73	70	55	47	47	50	49
	14	88	86	84	72	66	66	61	61	62	60	45
	15	90	86	80	81	72	75	73	75	70	73	80
	16	92	83	83	78	74	71	68	70	71	70	74
	17	—	—	—	—	—	—	—	—	—	—	—
	18	97	84	94	89	87	85	80	77	77	78	81
	19	93	97	94	83	68	58	49	51	47	51	52
	20	96	91	84	76	79	73	67	64	45	42	44
	21	84	79	81	77	68	73	73	73	73	73	75
	22	93	93	93	92	89	87	86	87	87	90	85
	23	97	94	96	94	75	70	81	83	77	80	87
	24	—	—	—	—	—	—	—	—	—	—	—
	25	93	91	92	87	73	62	62	60	62	60	57
	26	82	100	100	74	73	75	71	77	71	70	67
	27	49	47	47	67	64	63	70	65	65	73	72
	28	91	84	78	70	48	65	59	64	66	68	65
	29	84	93	82	84	85	76	77	71	71	73	78
	30	84	94	96	92	88	77	76	75	81	80	83
	31	—	—	—	—	—	—	—	—	—	—	84
Hourly Means	88	88	86	81	76	74	72	72	72	72	72	74
Tension of the Vapour. OCTOBER.	1	In. '264	In. '266	In. '263	In. '243	In. '235	In. '248	In. '261	In. '247	In. '249	In. '236	In. '229
	2	'216	'236	'269	'257	'273	'259	'247	'255	'307	'319	'295
	3	—	—	—	—	—	—	—	—	—	—	'306
	4	'243	'277	'358	'408	'416	'426	'417	'400	'393	'369	'392
	5	'440	'458	'465	'477	'473	'492	'509	'507	'501	'504	'479
	6	'418	'422	'429	'430	'426	'423	'422	'418	'407	'400	'405
	7	'396	'399	'396	'391	'389	'383	'399	'395	'410	'407	'413
	8	'415	'411	'414	'414	'426	'429	'434	'422	'423	'428	'430
	9	'226	'260	'276	'279	'296	'289	'292	'347	'364	'349	'360
	10	—	—	—	—	—	—	—	—	—	—	'368
	11	'177	'185	'182	'166	'159	'160	'150	'156	'167	'178	'173
	12	'215	'230	'248	'260	'269	'256	'255	'245	'253	'249	'256
	13	'199	'205	'208	'197	'201	'198	'169	'153	'154	'152	'174
	14	'178	'177	'176	'169	'167	'165	'155	'150	'155	'149	'134
	15	'149	'148	'157	'167	'161	'197	'191	'198	'194	'197	'182
	16	'246	'242	'257	'257	'261	'264	'265	'292	'302	'303	'301
	17	—	—	—	—	—	—	—	—	—	—	'295
	18	'230	'223	'283	'314	'358	'379	'409	'415	'411	'408	'397
	19	'244	'247	'269	'278	'237	'218	'198	'199	'194	'204	'176
	20	'151	'162	'190	'221	'255	'254	'238	'239	'186	'173	'164
	21	'167	'165	'186	'200	'194	'216	'214	'207	'205	'209	'208
	22	'210	'211	'210	'208	'209	'206	'201	'208	'213	'224	'222
	23	'200	'192	'212	'243	'221	'229	'280	'283	'265	'277	'272
	24	—	—	—	—	—	—	—	—	—	—	'267
	25	'289	'284	'290	'292	'241	'208	'205	'201	'186	'163	'141
	26	'134	'170	'180	'132	'130	'131	'130	'133	'122	'120	'105
	27	'059	'055	'060	'108	'111	'114	'136	'135	'136	'154	'130
	28	'127	'125	'143	'142	'116	'165	'150	'162	'170	'173	'159
	29	'134	'172	'164	'213	'243	'244	'253	'244	'246	'246	'258
	30	'184	'180	'206	'259	'282	'276	'272	'280	'293	'285	'290
	31	—	—	—	—	—	—	—	—	—	—	'262
Hourly Means	'227	'235	'250	'259	'260	'263	'264	'265	'266	'264	'260	'254

R.

9	10	11
3	4	5
58	56	62
72	70	78
—	—	—
78	83	85
84	87	90
83	84	86
93	95	94
96	96	84
78	81	85
—	—	—
48	47	50
87	90	92
50	61	49
60	55	45
73	70	80
70	72	74
—	—	—
78	78	81
51	47	52
42	42	44
73	73	75
90	87	85
80	80	87
—	—	—
60	58	57
70	63	67
73	64	72
68	64	65
73	78	83
80	84	84
—	—	—
72	72	71

In.	In.	In.
*236	*229	*239
*319	*295	*306
—	—	—
*369	*392	*383
*504	*479	*465
*400	*405	*413
*407	*417	*413
*428	*430	*392
*349	*360	*368
—	—	—
*178	*173	*196
*249	*256	*262
*152	*174	*137
*149	*134	*107
*197	*182	*196
*303	*301	*295
—	—	—
*408	*397	*391
*204	*176	*185
*173	*164	*150
*209	*208	*210
*224	*222	*212
*277	*272	*267
—	—	—
*163	*141	*127
*120	*105	*105
*154	*130	*139
*173	*159	*153
*246	*258	*241
*285	*290	*262
—	—	—
*264	*260	*254

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	17	
6	7	8	9	10	11	12	13	14	15	16	17	17	
76	88	90	88	92	88	89	92	93	89	88	88	88	78
83	90	88	90	89	90	—	—	—	—	—	—	—	83
—	—	—	—	—	—	99	97	95	96	97	97	97	90
90	91	93	91	95	95	94	94	96	96	96	96	96	93
92	92	95	96	96	97	96	96	95	95	94	92	94	92
87	88	95	96	95	94	92	92	95	95	94	94	94	92
88	88	96	96	96	92	90	91	92	90	87	96	96	92
80	80	74	73	72	78	85	85	83	89	93	94	94	88
90	88	81	84	81	81	—	—	—	—	—	—	—	82
—	—	—	—	—	—	84	84	85	82	83	76	76	70
64	70	79	84	85	94	93	91	94	91	93	84	84	88
93	94	92	94	97	93	89	86	87	87	83	88	88	73
39	66	72	78	80	86	88	86	89	88	89	92	92	75
58	75	80	84	92	92	88	84	83	89	87	78	78	79
77	81	83	85	85	86	86	88	73	75	75	—	—	82
74	82	85	84	84	87	—	—	—	—	—	—	—	85
—	—	—	—	—	—	92	94	94	94	95	97	97	85
86	84	85	72	81	87	88	87	88	84	90	93	93	73
71	62	66	73	76	89	88	90	87	92	91	89	89	70
50	50	57	71	68	76	86	82	83	86	86	85	85	80
78	76	77	75	75	86	91	93	93	93	93	93	93	90
89	89	90	91	93	92	91	80	93	92	92	94	94	88
87	97	94	95	90	85	—	—	—	—	—	—	—	75
—	—	—	—	—	—	96	96	93	93	93	92	92	65
71	73	73	85	85	81	79	78	74	77	87	83	83	72
46	48	50	51	56	57	57	54	53	53	52	50	50	74
80	99	91	78	74	80	82	81	82	77	78	84	84	85
65	70	72	84	82	84	84	77	81	84	84	96	96	87
83	85	86	94	73	92	91	93	93	93	94	—	—	81
84	82	83	90	88	93	—	—	—	—	—	—	—	—
—	—	—	—	—	—	85	87	94	95	99	98	98	—
77	80	82	84	84	87	88	87	87	88	88	88	88	—
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*251	*244	*240	*215	*201	*222	*217	*208	*214	*219	*213	*212	*212	*235
*275	*273	*260	*283	*281	*259	—	—	—	—	—	—	—	*272
—	—	—	—	—	—	*297	*294	*273	*273	*263	*261	*261	*385
*397	*400	*407	*397	*389	*387	*394	*392	*385	*394	*396	*422	*422	*461
*455	*451	*459	*458	*442	*441	*440	*440	*435	*435	*429	*418	*418	*418
*420	*420	*435	*430	*431	*423	*413	*409	*413	*410	*406	*408	*408	*404
*420	*420	*428	*419	*415	*401	*395	*405	*401	*395	*382	*417	*417	*354
*370	*369	*320	*285	*269	*277	*282	*274	*257	*259	*250	*248	*248	*292
*357	*345	*336	*349	*327	*318	—	—	—	—	—	—	—	*189
—	—	—	—	—	—	*225	*218	*213	*208	*212	*188	*188	*191
*201	*196	*218	*217	*212	*210	*209	*204	*215	*211	*227	*218	*218	*244
*265	*265	*255	*257	*253	*253	*242	*222	*216	*210	*200	*206	*206	*172
*148	*158	*158	*159	*160	*160	*159	*166	*173	*176	*184	*185	*185	*148
*121	*143	*142	*145	*147	*147	*134	*128	*127	*140	*140	*147	*147	*197
*185	*208	*209	*211	*224	*233	*233	*236	*211	*215	*215	*217	*217	*273
*300	*329	*332	*322	*324	*332	—	—	—	—	—	—	—	*215
—	—	—	—	—	—	*231	*223	*224	*216	*212	*215	*215	*338
*422	*385	*391	*336	*330	*337	*329	*310	*301	*268	*250	*247	*247	*197
*219	*182	*185	*183	*180	*174	*167	*163	*152	*158	*157	*154	*154	*177
*148	*139	*156	*177	*166	*164	*160	*146	*144	*152	*152	*166	*166	*204
*215	*210	*209	*202	*204	*209	*214	*216	*212	*212	*210	*212	*212	*208
*221	*218	*219	*218	*218	*217	*216	*179	*191	*181	*185	*201	*201	*253
*257	*239	*231	*222	*207	*198	—	—	—	—	—	—	—	*180
—	—	—	—	—	—	*305	*305	*294	*293	*293	*289	*289	*099
*147	*145	*144	*154	*154	*145	*138	*135	*127	*130	*139	*129	*129	*124
*069	*067	*068	*066	*067	*067	*067	*061	*061	*061	*060	*059	*059	*142
*145	*179	*161	*137	*133	*128	*129	*125	*127	*121	*122	*125	*125	*207
*146	*153	*152	*148	*137	*139	*139	*127	*131	*135	*132	*126	*126	*259
*232	*222	*221	*208	*170	*187	*181	*179	*174	*173	*176	*182	*182	—
*238	*243	*214	*209	*190	*196	—	—	—	—	—	—	—	—
—	—	—	—	—	—	*293	*295	*308	*319	*324	*323	*323	—
*255	*254	*252	*246	*240	*239	*239	*233	*230	*229	*228	*230	*230	*247

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. NOVEMBER.	1	100	100	98	97	94	94	93	92	93	93	97
	2	98	98	98	96	91	89	86	86	85	88	91
	3	96	96	91	93	94	93	95	95	95	96	97
	4	97	97	94	68	75	79	78	78	76	72	79
	5	90	90	80	79	74	74	67	59	67	60	69
	6	92	94	94	83	82	79	80	80	81	79	93
	7	—	—	—	—	—	—	—	—	—	—	—
	8	98	100	100	93	100	100	92	98	99	98	93
	9	98	97	97	97	95	85	78	81	72	69	70
	10	79	79	77	80	87	68	68	65	65	72	71
	11	78	78	76	76	79	79	75	73	73	71	77
	12	92	88	88	83	80	72	74	70	67	69	73
	13	91	91	91	82	79	73	73	74	81	80	81
	14	—	—	—	—	—	—	—	—	—	—	—
	15	90	86	87	84	80	81	89	78	67	64	75
	16	96	100	98	94	85	86	90	90	86	87	82
	17	80	78	82	84	82	78	69	82	87	76	87
	18	98	100	100	100	100	100	100	100	100	100	100
	19	79	79	81	78	80	88	88	81	73	82	81
	20	100	100	100	92	94	90	85	85	84	84	93
	21	—	—	—	—	—	—	—	—	—	—	—
	22	100	100	100	98	94	91	88	83	82	82	89
	23	98	98	100	100	100	100	96	96	96	96	92
	24	100	100	100	100	100	100	89	91	93	97	100
	25	97	97	100	96	90	90	87	93	95	94	93
	26	98	99	94	92	92	91	92	94	94	90	89
	27	91	91	89	88	98	90	93	84	90	94	90
	28	—	—	—	—	—	—	—	—	—	—	—
	29	100	100	100	100	100	100	100	100	100	100	100
	30	97	100	94	94	92	89	89	87	86	77	75
Hourly Means	94	94	93	90	89	87	85	84	84	84	83	86
Tension of the Vapour. NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	.327	.333	.339	.350	.365	.377	.398	.394	.387	.369	.341
	2	.348	.348	.358	.367	.372	.386	.385	.410	.379	.372	.349
	3	.296	.298	.367	.380	.375	.366	.395	.395	.401	.391	.383
	4	.256	.252	.281	.233	.258	.299	.291	.288	.279	.269	.250
	5	.188	.187	.188	.196	.202	.206	.193	.182	.193	.171	.176
	6	.163	.154	.172	.172	.178	.179	.179	.179	.181	.181	.197
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.292	.300	.305	.292	.305	.311	.312	.328	.329	.328	.321
	9	.360	.359	.385	.396	.410	.345	.303	.293	.267	.262	.227
	10	.174	.176	.175	.187	.202	.163	.166	.160	.158	.159	.162
	11	.161	.165	.161	.165	.172	.175	.169	.166	.166	.161	.168
	12	.163	.152	.159	.179	.183	.172	.177	.172	.161	.169	.166
	13	.180	.176	.181	.183	.183	.176	.183	.191	.205	.195	.192
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.206	.202	.204	.208	.204	.208	.219	.196	.174	.167	.184
	16	.150	.150	.168	.199	.204	.220	.249	.260	.269	.277	.248
	17	.244	.241	.252	.265	.279	.282	.264	.299	.303	.286	.300
	18	.263	.264	.264	.266	.270	.272	.272	.272	.276	.284	.307
	19	.156	.154	.144	.133	.134	.130	.138	.128	.121	.132	.124
	20	.108	.108	.114	.119	.136	.139	.137	.142	.143	.141	.143
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.200	.212	.212	.226	.239	.257	.263	.262	.249	.246	.232
	23	.259	.262	.269	.285	.302	.327	.343	.354	.351	.354	.356
	24	.330	.302	.317	.311	.334	.349	.317	.325	.328	.323	.319
	25	.240	.240	.242	.251	.240	.240	.226	.230	.228	.223	.209
	26	.141	.139	.133	.131	.131	.131	.132	.137	.137	.132	.120
	27	.122	.127	.130	.133	.143	.140	.142	.149	.160	.163	.151
	28	—	—	—	—	—	—	—	—	—	—	—
	29	.073	.073	.074	.075	.078	.085	.085	.086	.091	.093	.086
	30	.102	.104	.110	.118	.119	.121	.123	.124	.126	.115	.106
Hourly Means	.212	.211	.219	.224	.231	.233	.233	.235	.233	.230	.227	.224

UR.

9 10 11

3 4 5

93	93	97
85	88	91
95	96	97
78	72	79
58	60	69
79	79	93
—	—	—
98	98	93
69	64	70
66	72	71
71	73	77
69	72	73
80	83	81
—	—	—
64	67	75
87	83	82
76	74	87
100	100	100
82	78	81
84	87	93
—	—	—
82	86	89
96	94	92
97	100	100
94	94	93
90	87	89
94	96	90
—	—	—
100	100	100
77	73	75

83 83 86

In.	In.	In.
'369	'352	'341
'372	'371	'349
'391	'393	'383
'269	'253	'250
'171	'170	'176
'181	'184	'197
—	—	—
'328	'330	'321
'262	'267	'227
'159	'168	'162
'161	'164	'168
'169	'168	'166
'195	'197	'192
—	—	—
'167	'170	'184
'277	'257	'248
'286	'278	'300
'284	'299	'307
'132	'123	'124
'141	'141	'143
—	—	—
'246	'238	'232
'353	'351	'356
'323	'327	'319
'223	'221	'209
'132	'125	'120
'163	'160	'151
—	—	—
'093	'093	'086
'115	'103	'106

'230 '227 '224

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
100	96	98	94	96	97	96	96	97	97	99	100	96
93	95	95	95	95	97	96	96	97	97	98	97	93
97	96	96	97	97	89	89	84	91	91	97	98	94
83	84	76	79	72	61	65	82	88	88	90	90	81
76	79	78	85	79	81	86	89	93	93	93	93	79
96	91	98	97	97	96	—	—	—	—	—	—	90
—	—	—	—	—	—	96	97	95	95	96	96	—
93	98	98	96	96	96	96	97	97	96	97	97	97
66	83	79	62	61	56	61	67	71	71	76	73	76
71	75	77	68	76	86	79	88	82	80	79	78	76
76	71	78	80	80	80	80	80	81	85	79	89	78
75	77	80	85	86	85	85	83	79	79	82	86	80
86	86	88	80	91	95	—	—	—	—	—	—	86
—	—	—	—	—	—	91	91	91	93	91	90	—
81	92	90	92	91	86	86	86	92	91	90	98	85
82	85	87	82	82	79	85	86	87	82	87	78	87
89	88	85	91	93	89	85	88	89	95	97	98	85
100	100	100	99	87	87	88	82	82	83	80	83	95
78	86	86	89	96	95	99	100	100	100	100	100	87
91	95	93	97	96	93	—	—	—	—	—	—	—
—	—	—	—	—	—	98	98	100	100	100	100	94
91	98	96	91	92	91	100	96	91	91	97	97	93
95	91	91	91	93	96	100	100	100	100	100	100	97
95	91	98	99	96	91	95	97	98	98	98	98	97
94	93	98	98	95	91	99	91	91	97	87	90	94
93	100	100	100	100	100	100	100	100	100	91	91	95
90	95	95	92	92	91	—	—	—	—	—	—	—
—	—	—	—	—	—	100	100	100	100	100	100	94
100	100	100	100	100	100	100	100	100	100	100	100	100
84	85	82	86	87	91	81	85	100	100	100	100	89
—	—	—	—	—	—	—	—	—	—	—	—	—
88	90	90	90	90	89	90	91	92	93	93	93	89
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'318	'321	'338	'351	'333	'340	'338	'356	'338	'337	'346	'349	'350
'339	'332	'314	'369	'356	'350	'341	'338	'341	'353	'317	'312	'359
'395	'357	'370	'383	'381	'314	'358	'365	'382	'377	'265	'253	'347
'250	'218	'205	'185	'184	'160	'159	'185	'185	'177	'183	'191	'228
'176	'172	'164	'173	'168	'173	'176	'177	'178	'174	'172	'168	'180
'180	'158	'159	'161	'161	'157	—	—	—	—	—	—	—
—	—	—	—	—	—	'273	'271	'274	'278	'283	'286	'198
'321	'328	'328	'322	'321	'322	'333	'335	'335	'353	'354	'367	'324
'205	'218	'202	'176	'165	'153	'168	'157	'155	'165	'170	'168	'249
'161	'167	'167	'151	'165	'179	'166	'177	'169	'166	'162	'160	'168
'162	'157	'163	'166	'166	'166	'168	'162	'168	'168	'152	'167	'165
'168	'167	'172	'176	'179	'176	'176	'176	'172	'175	'180	'185	'172
'207	'211	'218	'219	'221	'225	—	—	—	—	—	—	—
—	—	—	—	—	—	'210	'211	'211	'205	'203	'205	'200
'190	'201	'196	'191	'180	'166	'166	'165	'230	'157	'153	'159	'186
'214	'258	'260	'242	'232	'261	'265	'262	'262	'266	'260	'258	'238
'289	'281	'275	'293	'286	'278	'285	'270	'267	'274	'277	'268	'276
'391	'302	'302	'339	'286	'269	'263	'295	'216	'238	'177	'176	'266
'119	'127	'121	'127	'122	'125	'124	'122	'121	'116	'116	'109	'128
'146	'163	'165	'171	'166	'158	—	—	—	—	—	—	—
—	—	—	—	—	—	'184	'181	'197	'206	'209	'211	'155
'236	'143	'237	'241	'239	'241	'267	'252	'252	'257	'254	'242	'242
'353	'351	'350	'351	'353	'352	'346	'349	'357	'347	'347	'334	'334
'290	'269	'272	'275	'255	'250	'252	'250	'248	'247	'248	'291	'291
'211	'205	'206	'206	'191	'181	'185	'165	'161	'166	'155	'165	'206
'122	'124	'125	'121	'120	'116	'112	'116	'121	'122	'118	'125	'126
'151	'160	'159	'159	'157	'156	—	—	—	—	—	—	—
—	—	—	—	—	—	'076	'075	'072	'072	'070	'069	'129
'084	'081	'081	'084	'085	'091	'093	'103	'100	'097	'103	'101	'087
'111	'117	'118	'131	'112	'157	'138	'144	'143	'132	'135	'135	'124
—	—	—	—	—	—	—	—	—	—	—	—	—
'220	'219	'219	'222	'217	'212	'214	'213	'212	'212	'207	'207	'220

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Mean Guthrie Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. DECEMBER.	1 100	99	75	68	69	66	68	68	74	62	79	75
	2 100	100	100	100	94	91	90	89	79	86	91	97
	3 94	94	95	94	94	91	89	92	91	86	91	90
	4 100	100	100	97	96	97	100	100	97	92	89	92
	5 —	—	—	—	—	—	—	—	—	—	—	—
	6 93	100	93	91	94	94	99	96	95	97	97	100
	7 91	91	96	74	74	79	79	77	78	78	91	94
	8 89	88	86	79	81	79	77	78	83	85	85	88
	9 86	90	92	91	100	100	100	100	100	100	100	100
	10 100	100	100	100	100	100	82	79	82	83	83	76
	11 100	100	100	99	97	93	78	73	75	72	81	84
	12 —	—	—	—	—	—	—	—	—	—	—	—
	13 99	99	97	99	99	99	96	97	99	99	100	100
	14 95	95	97	97	97	97	95	97	98	97	97	100
	15 86	97	79	85	71	79	87	67	70	71	67	77
	16 94	94	91	91	91	91	91	86	83	83	95	85
	17 93	98	85	81	63	79	77	86	85	86	87	91
	18 100	100	100	100	100	100	99	95	99	89	88	88
	19 —	—	—	—	—	—	—	—	—	—	—	—
	20 95	93	90	100	100	98	94	91	95	75	84	100
	21 100	100	98	100	98	98	98	92	92	90	90	90
	22 95	96	98	100	98	98	90	93	87	87	87	78
	23 98	100	96	100	93	98	93	93	100	99	88	87
	24 88	93	93	88	94	82	77	85	79	79	83	86
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 98	100	100	100	93	80	92	92	92	92	92	97
	28 93	95	95	93	86	86	90	99	95	95	95	99
	29 97	96	93	92	88	81	83	87	86	87	87	88
	30 90	93	92	92	93	92	95	90	93	95	95	99
	31 100	100	100	99	95	99	95	97	99	99	99	99
Hourly Means	95	97	94	93	91	90	89	88	89	87	89	91
Tension of the Vapour. DECEMBER.	1 In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2 '180	'188	'159	'151	'156	'167	'155	'168	'187	'164	'185	'172
	3 '205	'201	'200	'206	'204	'205	'209	'207	'184	'198	'202	'197
	4 '179	'179	'181	'179	'179	'178	'173	'177	'171	'155	'159	'151
	5 '143	'141	'141	'147	'147	'161	'169	'169	'161	'159	'154	'158
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 '137	'147	'137	'149	'163	'158	'174	'176	'182	'180	'180	'175
	8 '169	'169	'171	'156	'166	'183	'179	'184	'190	'191	'208	'191
	9 '191	'186	'191	'192	'214	'225	'230	'238	'250	'250	'246	'250
	10 '193	'198	'191	'199	'214	'223	'230	'234	'243	'263	'269	'277
	11 '320	'307	'308	'309	'321	'316	'288	'278	'288	'255	'243	'217
	12 '194	'198	'201	'204	'206	'199	'164	'162	'167	'161	'172	'166
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 '217	'215	'206	'208	'208	'210	'208	'208	'204	'195	'196	'192
	15 '172	'172	'177	'182	'182	'183	'181	'183	'184	'183	'185	'187
	16 '170	'161	'132	'145	'124	'141	'159	'125	'130	'133	'120	'127
	17 '081	'081	'079	'079	'084	'087	'090	'089	'091	'093	'107	'100
	18 '091	'096	'088	'087	'073	'086	'103	'122	'128	'131	'133	'131
	19 '087	'056	'091	'106	'124	'136	'147	'158	'168	'157	'161	'168
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 '081	'081	'078	'082	'084	'084	'083	'084	'087	'071	'074	'077
	22 '077	'074	'071	'075	'083	'095	'098	'096	'098	'102	'107	'108
	23 '115	'112	'114	'119	'122	'128	'120	'122	'118	'119	'119	'105
	24 '100	'102	'108	'109	'106	'119	'121	'124	'132	'133	'119	'117
	25 '104	'107	'107	'110	'116	'098	'093	'102	'096	'096	'099	'101
	26 —	—	—	—	—	—	—	—	—	—	—	—
	27 '183	'081	'078	'081	'088	'080	'099	'096	'100	'103	'102	'109
	28 '167	'165	'166	'174	'170	'177	'177	'189	'186	'190	'190	'199
	29 '215	'219	'214	'221	'230	'220	'230	'234	'231	'232	'234	'234
	30 '237	'234	'233	'252	'259	'265	'285	'282	'283	'275	'275	'273
	31 '269	'265	'267	'269	'280	'297	'285	'285	'292	'285	'285	'282
Hourly Means	'164	'159	'157	'161	'166	'170	'171	'173	'175	'172	'174	'172

* Christmas Day.

UR.

9	10	11
3	4	5
62	79	75
86	91	97
86	91	90
92	89	92
—	—	—
97	97	100
78	91	94
85	85	88
100	100	100
83	83	76
72	81	81
—	—	—
99	100	100
97	97	100
71	67	77
83	95	85
86	87	91
89	88	88
—	—	—
75	81	100
90	90	90
87	87	78
99	88	87
79	83	86
—	—	—
92	92	97
95	95	96
87	87	88
95	95	99
99	99	99
87	89	91

In.	In.	In.
*164	*185	*172
*198	*202	*197
*155	*149	*151
*159	*154	*158
—	—	—
*180	*180	*15
*191	*208	*19
*250	*246	*259
*263	*269	*277
*255	*243	*247
*161	*172	*166
—	—	—
*195	*196	*192
*183	*183	*187
*133	*129	*127
*093	*107	*100
*131	*133	*131
*157	*161	*168
—	—	—
*071	*074	*077
*102	*107	*108
*119	*119	*105
*133	*119	*117
*096	*099	*101
—	—	—
*103	*102	*109
*190	*190	*199
*232	*234	*234
*275	*275	*273
*285	*285	*282
—	—	—
*172	*174	*172

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
77	82	82	82	98	97	100	100	100	100	99	100	84
97	97	95	94	91	96	99	95	94	91	91	95	91
92	91	94	91	90	92	93	89	96	100	99	100	93
92	95	95	95	91	91	—	—	—	—	—	—	96
—	—	—	—	—	—	100	100	91	90	92	95	91
92	80	80	95	81	86	82	86	85	89	90	90	91
100	80	100	100	98	99	100	100	95	95	95	86	90
92	93	95	95	95	94	91	81	77	80	79	83	86
100	100	100	100	100	100	100	100	99	100	100	100	98
81	80	76	82	85	82	83	85	91	91	100	100	88
92	90	91	91	97	100	—	—	—	—	—	—	92
—	—	—	—	—	—	100	99	99	99	99	100	98
99	99	99	99	99	99	99	99	99	97	95	95	98
99	98	99	99	99	99	99	95	95	95	94	91	97
79	89	82	78	98	95	98	100	100	91	93	98	85
83	90	89	90	87	87	92	98	91	98	95	92	90
93	76	70	95	88	92	95	100	98	98	69	93	87
89	89	86	81	89	90	—	—	—	—	—	—	95
—	—	—	—	—	—	98	98	98	98	100	93	96
98	100	98	98	98	100	100	100	100	98	98	98	95
88	92	93	100	98	96	96	100	98	91	89	92	95
88	93	75	83	89	92	89	89	92	92	94	91	90
88	88	90	93	88	90	95	92	93	82	86	82	92
87	90	87	92	98	100	—	—	—	—	—	—	90
—	—	—	—	—	—	—	—	—	—	—	—	96
100	97	98	100	98	100	99	97	97	100	95	95	95
99	97	97	89	95	97	97	95	94	97	96	97	95
92	93	93	97	97	97	95	95	92	90	88	88	91
99	99	99	100	99	99	100	100	100	99	99	99	96
99	99	99	100	100	99	99	99	100	99	99	100	99
92	91	91	93	94	95	96	96	95	95	93	95	92
In.	In.	In.	In.	In.	In.	In.	In.	In. ⁴	In.	In.	In.	In.
*171	*174	*172	*172	*197	*205	*216	*217	*211	*209	*205	*205	*183
*201	*201	*199	*192	*190	*181	*185	*182	*179	*179	*181	*181	*195
*153	*150	*149	*145	*144	*144	*142	*138	*145	*147	*143	*143	*159
*159	*169	*176	*183	*181	*180	—	—	—	—	—	—	*155
—	—	—	—	—	—	*146	*143	*136	*131	*129	*129	*159
*141	*144	*136	*151	*154	*159	*153	*156	*157	*167	*169	*168	*159
*185	*144	*177	*180	*235	*178	*186	*184	*180	*178	*193	*181	*182
*252	*246	*248	*249	*248	*246	*246	*216	*197	*199	*192	*191	*225
*277	*285	*285	*295	*289	*322	*314	*319	*294	*293	*308	*311	*264
*214	*206	*197	*204	*202	*193	*193	*193	*196	*187	*192	*191	*243
*154	*142	*143	*145	*145	*156	—	—	—	—	—	—	*187
—	—	—	—	—	—	*242	*235	*235	*235	*234	*234	*187
*187	*186	*179	*179	*172	*172	*170	*170	*170	*170	*167	*170	*190
*185	*183	*185	*185	*183	*185	*185	*181	*180	*181	*163	*174	*181
*126	*133	*117	*099	*114	*104	*102	*099	*094	*080	*079	*081	*121
*089	*108	*103	*103	*101	*097	*099	*101	*098	*090	*087	*089	*093
*133	*103	*103	*117	*103	*099	*101	*099	*091	*089	*075	*080	*103
*172	*171	*171	*163	*159	*171	—	—	—	—	—	—	*132
—	—	—	—	—	—	*106	*105	*103	*102	*099	*090	*132
*075	*073	*070	*075	*075	*077	*077	*076	*074	*073	*072	*069	*077
*105	*119	*120	*130	*129	*128	*129	*136	*131	*117	*110	*111	*106
*101	*093	*082	*088	*094	*099	*091	*089	*093	*093	*095	*095	*105
*118	*118	*121	*125	*119	*121	*119	*119	*110	*110	*113	*105	*116
*102	*103	*097	*101	*101	*105	—	—	—	—	—	—	*096
—	—	—	—	—	—	*075	*075	*078	*080	*081	*084	*116
*111	*106	*106	*122	*127	*136	*137	*139	*139	*149	*149	*153	*116
*199	*200	*200	*190	*197	*201	*206	*203	*205	*208	*208	*213	*190
*235	*234	*228	*229	*227	*227	*234	*236	*233	*237	*236	*236	*229
*269	*273	*273	*265	*264	*260	*260	*260	*253	*255	*249	*264	*263
*275	*269	*266	*267	*278	*275	*285	*292	*297	*305	*305	*308	*283
*169	*167	*166	*167	*170	*170	*169	*168	*165	*164	*163	*165	*167

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Guthrie's Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1	100	99	100	100	100	99	100	99	97	93	93
	2	—	—	—	—	—	—	—	—	—	—	—
	3	95	95	91	87	85	85	83	81	84	79	85
	4	91	93	90	77	85	92	82	78	89	93	100
	5	98	99	97	99	99	100	99	87	90	88	84
	6	100	98	100	98	98	98	100	98	100	100	100
	7	100	98	98	94	100	98	98	100	98	98	98
	8	100	97	97	90	95	95	95	95	89	82	86
	9	—	—	—	—	—	—	—	—	—	—	—
	10	97	96	100	100	100	100	100	100	100	100	41
	11	100	100	93	95	94	95	95	91	91	97	100
	12	100	100	100	100	100	95	98	91	96	90	85
	13	81	83	97	80	78	85	98	89	88	92	93
	14	100	100	100	100	100	100	100	100	100	100	100
	15	100	100	100	99	100	100	100	100	98	87	84
	16	—	—	—	—	—	—	—	—	—	—	—
	17	81	81	86	90	89	73	73	83	69	70	82
	18	69	100	64	89	84	82	82	76	82	71	76
	19	100	100	100	100	100	95	92	92	92	89	87
	20	78	78	79	74	74	64	64	75	68	71	79
	21	79	80	80	72	72	60	54	48	50	63	62
	22	98	100	94	89	90	87	79	81	77	77	91
	23	—	—	—	—	—	—	—	—	—	—	—
	24	100	100	100	92	80	80	83	82	81	81	87
	25	100	98	100	93	74	82	87	86	82	84	86
	26	95	97	96	98	98	99	100	100	100	100	100
	27	99	100	100	100	100	100	98	100	99	100	100
	28	81	80	80	83	78	81	80	80	80	82	99
	29	96	96	79	92	76	75	73	74	75	72	83
	30	—	—	—	—	—	—	—	—	—	—	—
	31	99	97	100	90	98	93	97	98	98	70	59
Hourly Means	94	95	94	92	90	89	89	88	88	87	88	89
Tension of the Vapour. JANUARY.	1	In. '308	In. '318	In. '311	In. '319	In. '314	In. '328	In. '322	In. '332	In. '343	In. '329	In. '318
	2	—	—	—	—	—	—	—	—	—	—	—
	3	'178	'178	'176	'180	'184	'186	'187	'190	'187	'193	'179
	4	'181	'195	'180	'131	'115	'116	'127	'117	'128	'133	'129
	5	'131	'159	'142	'149	'152	'163	'177	'174	'179	'192	'176
	6	'089	'076	'075	'075	'075	'079	'084	'085	'085	'087	'085
	7	'085	'089	'088	'091	'094	'098	'105	'111	'112	'114	'110
	8	'170	'170	'168	'170	'167	'172	'174	'182	'173	'150	'148
	9	—	—	—	—	—	—	—	—	—	—	—
	10	'029	'027	'029	'032	'036	'041	'044	'041	'049	'049	'020
	11	'072	'072	'060	'094	'096	'105	'107	'109	'113	'121	'117
	12	'080	'070	'068	'089	'107	'116	'130	'135	'136	'134	'117
	13	'179	'163	'182	'162	'156	'179	'204	'194	'194	'203	'207
	14	'216	'217	'221	'224	'223	'227	'227	'230	'231	'231	'222
	15	'215	'213	'255	'253	'272	'281	'292	'289	'294	'316	'279
	16	—	—	—	—	—	—	—	—	—	—	—
	17	'145	'143	'122	'128	'116	'097	'093	'115	'097	'102	'115
	18	'117	'139	'084	'113	'102	'097	'093	'089	'093	'081	'087
	19	'062	'032	'063	'072	'085	'085	'093	'095	'103	'104	'106
	20	'129	'132	'133	'143	'157	'143	'119	'177	'171	'186	'188
	21	'183	'183	'183	'181	'201	'181	'153	'140	'131	'144	'122
	22	'090	'092	'093	'093	'100	'110	'111	'118	'118	'127	'125
	23	—	—	—	—	—	—	—	—	—	—	—
	24	'121	'116	'118	'126	'133	'138	'146	'144	'151	'151	'157
	25	'159	'151	'164	'177	'156	'185	'195	'197	'200	'205	'198
	26	'216	'218	'218	'224	'224	'225	'230	'234	'240	'245	'245
	27	'225	'223	'228	'236	'246	'256	'262	'258	'244	'247	'236
	28	'149	'144	'143	'147	'151	'163	'163	'166	'166	'167	'187
	29	'139	'157	'137	'162	'134	'131	'130	'132	'137	'132	'149
	30	—	—	—	—	—	—	—	—	—	—	—
	31	'187	'188	'199	'207	'208	'211	'215	'219	'222	'229	'166
Hourly Means	'148	'150	'149	'153	'156	'159	'163	'164	'165	'168	'164	'159

11.

9	10	11
3	4	5
97	93	93
—	—	—
84	79	85
93	98	100
88	87	84
100	100	100
98	98	98
80	82	86
—	—	—
100	100	41
97	98	100
90	85	98
92	93	95
100	100	100
98	87	84
—	—	—
70	82	85
71	76	86
88	87	100
71	79	85
63	62	79
77	77	91
—	—	—
81	87	86
84	86	90
100	100	100
100	99	100
82	99	99
72	83	84
—	—	—
96	70	59
87	88	89

In.	In.	In.
'329	'348	'351
—	—	—
'193	'179	'181
'133	'130	'129
'192	'176	'149
'087	'087	'085
'111	'110	'110
'150	'150	'148
—	—	—
'049	'049	'020
'121	'119	'117
'131	'117	'116
'203	'203	'207
'231	'231	'232
'316	'279	'239
—	—	—
'102	'115	'116
'081	'081	'087
'104	'106	'119
'186	'188	'186
'144	'122	'142
'127	'125	'137
—	—	—
'151	'157	'150
'205	'198	'189
'243	'245	'247
'247	'236	'230
'167	'187	'186
'132	'149	'150
—	—	—
'229	'166	'126
'168	'164	'159

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
100	81	83	88	83	77	—	—	—	—	—	—	94
—	—	—	—	—	—	93	89	95	95	95	94	81
85	80	81	79	79	79	75	79	85	87	88	81	93
95	92	97	98	95	91	100	92	92	93	100	100	92
76	85	91	72	95	98	98	88	80	95	98	99	99
98	94	100	98	100	99	100	100	100	100	98	95	98
95	100	98	99	99	100	99	99	95	96	97	—	94
90	92	96	97	87	98	—	—	—	—	—	—	94
—	—	—	—	—	—	98	97	97	97	97	—	94
100	100	97	58	94	100	100	100	100	100	100	100	96
100	97	94	95	98	98	98	100	100	100	100	100	97
98	89	88	88	88	89	89	89	91	87	88	87	93
95	95	95	95	96	97	97	98	98	98	98	100	93
100	100	100	100	100	100	100	100	100	100	100	100	100
99	83	83	87	93	88	—	—	—	—	—	—	94
—	—	—	—	—	—	99	100	95	91	87	89	81
80	80	80	84	87	84	84	84	83	81	86	78	88
91	91	93	94	97	93	96	100	100	100	100	100	91
100	82	87	90	88	95	86	87	87	81	80	78	91
87	100	84	87	88	80	79	79	78	75	76	79	78
66	72	77	80	81	84	86	89	92	91	98	97	75
94	91	94	97	100	100	—	—	—	—	—	—	91
—	—	—	—	—	—	93	93	93	96	93	98	93
92	94	99	99	100	100	100	100	100	100	100	100	91
92	92	94	99	99	99	98	95	93	93	87	90	91
93	100	100	100	100	100	100	100	100	100	100	100	99
100	100	100	99	97	98	99	93	95	82	91	90	97
100	99	100	95	75	78	88	91	94	95	92	100	88
79	79	82	84	85	85	—	—	—	—	—	—	86
—	—	—	—	—	—	100	100	100	100	100	100	86
60	77	78	80	93	93	85	92	76	76	73	74	86
91	93	91	90	92	93	94	94	93	93	93	93	91
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'267	'212	'197	'191	'177	'156	—	—	—	—	—	—	'257
—	—	—	—	—	—	'168	'166	'170	'175	'175	'175	'181
'184	'179	'181	'174	'177	'179	'173	'178	'184	'189	'186	'173	'125
'108	'103	'106	'106	'101	'099	'105	'100	'101	'107	'116	'116	'130
'121	'125	'132	'093	'107	'102	'098	'087	'091	'086	'080	'081	'080
'081	'074	'079	'078	'077	'077	'078	'079	'080	'084	'079	'083	'122
'121	'120	'128	'137	'141	'146	'148	'153	'148	'152	'159	'160	'127
'159	'154	'151	'144	'123	'128	—	—	—	—	—	—	'127
—	—	—	—	—	—	'040	'036	'034	'033	'031	'029	'127
'039	'035	'034	'021	'032	'034	'034	'034	'038	'041	'049	'050	'127
'115	'114	'112	'115	'118	'117	'115	'117	'115	'113	'089	'072	'127
'115	'130	'129	'129	'137	'139	'138	'143	'147	'156	'161	'164	'127
'205	'207	'205	'207	'203	'209	'211	'213	'211	'213	'215	'214	'127
'231	'238	'241	'243	'247	'245	'243	'253	'245	'244	'247	'244	'127
'217	'185	'178	'184	'184	'172	—	—	—	—	—	—	'127
—	—	—	—	—	—	'170	'172	'167	'161	'155	'156	'127
'115	'116	'117	'128	'127	'127	'130	'130	'141	'142	'147	'134	'123
'087	'084	'081	'083	'087	'085	'083	'076	'072	'066	'064	'063	'088
'116	'108	'115	'122	'124	'131	'126	'113	'123	'122	'124	'127	'101
'187	'199	'176	'184	'185	'180	'182	'184	'184	'182	'182	'184	'171
'114	'112	'113	'107	'107	'103	'097	'096	'099	'093	'097	'096	'132
'138	'117	'120	'120	'124	'121	—	—	—	—	—	—	'117
—	—	—	—	—	—	'124	'124	'124	'126	'121	'132	'117
'146	'143	'145	'144	'145	'143	'143	'137	'143	'143	'146	'149	'141
'199	'199	'201	'204	'209	'205	'207	'205	'205	'209	'207	'206	'193
'245	'250	'237	'237	'232	'234	'223	'216	'222	'227	'227	'227	'231
'223	'213	'230	'204	'204	'199	'196	'187	'189	'165	'175	'163	'217
'190	'193	'191	'180	'129	'124	'132	'132	'133	'134	'133	'137	'155
'136	'134	'137	'139	'139	'139	—	—	—	—	—	—	'150
—	—	—	—	—	—	'175	'179	'181	'183	'185	'187	'150
—	—	—	—	—	—	'119	'127	'106	'106	'102	'105	'160
'124	'138	'137	'129	'136	'135	—	—	—	—	—	—	'151
'153	'150	'148	'146	'145	'143	'141	'140	'141	'140	'140	'140	'151

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Baromet. Mean Gauging Time.	0	1	2	3	4	5	6	7	8	9	10	11
Baromet. Mean Gauging Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air, FEBRUARY.	1	68	71	70	68	63	66	76	79	74	68	70
	2	100	100	100	87	83	77	78	72	70	72	75
	3	100	100	100	100	75	68	81	72	70	73	78
	4	100	92	90	88	85	83	83	93	95	99	98
	5	84	87	89	88	85	85	85	79	80	84	80
	6	—	—	—	—	—	—	—	—	—	—	—
	7	86	100	85	83	78	78	73	78	77	86	88
	8	100	98	95	92	91	86	92	88	81	84	87
	9	100	97	92	77	79	70	71	76	66	69	65
	10	87	92	98	96	93	94	91	91	80	92	90
	11	100	100	97	100	87	87	95	76	73	69	66
	12	96	98	98	95	80	73	75	70	71	75	83
	13	—	—	—	—	—	—	—	—	—	—	—
	14	100	100	100	81	74	72	63	64	63	65	69
	15	89	89	88	77	77	77	59	74	66	67	77
	16	83	83	86	86	74	71	68	68	71	75	78
	17	86	100	92	83	86	77	76	75	79	81	83
	18	97	96	89	65	74	70	64	63	70	72	78
	19	100	99	98	83	85	87	82	80	79	81	82
	20	—	—	—	—	—	—	—	—	—	—	—
	21	79	75	75	69	66	61	57	53	54	47	48
	22	100	97	95	95	95	91	92	81	79	97	97
	23	91	98	96	88	71	66	54	74	78	74	82
	24	72	76	75	64	69	64	70	75	78	70	77
	25	95	94	91	87	89	88	91	93	88	84	74
	26	100	100	97	87	77	67	64	57	67	69	68
	27	—	—	—	—	—	—	—	—	—	—	—
	28	81	84	79	99	91	100	100	91	88	94	94
Hourly Means	92	93	91	85	80	78	77	76	75	77	79	81
Tension of the Vapour, FEBRUARY.	1	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	'102	'107	'109	'110	'107	'111	'121	'120	'118	'114	'113
	3	'116	'119	'120	'137	'162	'155	'159	'151	'144	'135	'158
	4	'167	'152	'153	'181	'156	'156	'193	'183	'182	'185	'184
	5	'183	'176	'176	'191	'202	'201	'201	'216	'212	'219	'220
	6	'134	'135	'135	'132	'131	'134	'134	'122	'126	'130	'122
	7	—	—	—	—	—	—	—	—	—	—	—
	8	'109	'116	'102	'100	'098	'102	'101	'110	'114	'127	'131
	9	'107	'108	'108	'111	'117	'114	'128	'131	'127	'129	'129
	10	'123	'124	'129	'126	'127	'124	'138	'146	'132	'137	'130
	11	'103	'098	'095	'082	'081	'084	'084	'087	'078	'089	'085
	12	'050	'047	'048	'055	'054	'059	'071	'060	'060	'060	'061
	13	'081	'084	'087	'089	'088	'088	'090	'095	'100	'104	'111
	14	—	—	—	—	—	—	—	—	—	—	—
	15	'111	'106	'114	'124	'129	'142	'139	'146	'148	'153	'158
	16	'100	'085	'094	'092	'104	'117	'100	'142	'122	'119	'138
	17	'099	'114	'123	'155	'147	'149	'147	'147	'150	'157	'160
	18	'119	'116	'129	'140	'167	'155	'165	'165	'173	'171	'170
	19	'112	'112	'127	'116	'151	'148	'140	'142	'160	'160	'175
	20	'171	'177	'183	'167	'178	'190	'193	'192	'188	'186	'180
	21	—	—	—	—	—	—	—	—	—	—	—
	22	'171	'165	'165	'163	'162	'157	'162	'158	'168	'151	'150
	23	'171	'172	'178	'187	'199	'201	'213	'203	'191	'213	'209
	24	'160	'163	'178	'178	'149	'136	'111	'163	'151	'146	'151
	25	'089	'096	'100	'089	'097	'097	'104	'115	'126	'118	'131
	26	'073	'070	'073	'082	'091	'094	'102	'108	'115	'103	'092
	27	'084	'084	'105	'128	'131	'118	'115	'109	'132	'137	'134
	28	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	'119	'119	'123	'129	'133	'134	'137	'141	'141	'144	'145	'145

FOUR.

9	10	11
3	4	5
68	70	86
72	75	90
73	78	95
99	99	98
81	80	89
—	—	—
86	88	86
84	87	89
69	65	65
92	90	98
69	66	93
75	83	93
—	—	—
65	69	74
67	77	74
75	78	74
81	83	81
72	74	82
81	82	—
—	—	—
47	48	—
97	97	—
74	82	—
70	77	—
84	74	—
69	68	—
—	—	—
94	94	—
77	79	84
In.	In.	In.
'111	'113	'127
'155	'158	'171
'185	'184	'181
'219	'220	'216
'130	'122	'130
—	—	—
'127	'131	'087
'129	'129	'130
'137	'130	'127
'089	'085	'088
'060	'061	'071
'104	'111	'112
—	—	—
'153	'158	'158
'119	'138	'127
'157	'160	'161
'171	'170	'165
'160	'175	'167
'186	'180	'174
—	—	—
'151	'150	'171
'213	'209	'206
'146	'151	'150
'118	'131	'130
'103	'092	'100
'137	'134	'146
—	—	—
'198	'199	'174
'144	'145	'145

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
89	93	94	97	100	100	100	100	95	92	92	97	84
95	97	99	82	100	100	100	100	100	100	100	100	91
99	89	95	95	95	95	97	97	98	100	100	99	90
97	98	99	100	100	100	88	85	83	87	84	76	96
92	95	97	93	95	93	—	—	—	—	—	—	68
—	—	—	—	—	—	83	84	86	88	91	92	88
76	80	82	87	94	97	100	100	100	100	100	100	88
92	92	92	90	87	100	100	100	100	100	100	98	93
78	72	82	87	79	75	77	81	89	81	87	86	79
100	100	100	100	100	98	96	100	100	100	100	100	96
93	98	93	88	93	94	90	88	90	90	94	90	89
96	100	100	100	100	100	—	—	—	—	—	—	89
—	—	—	—	—	—	94	95	84	84	86	100	83
73	86	81	81	85	99	96	98	100	87	84	89	82
78	91	84	89	87	78	91	95	95	95	95	78	82
95	97	98	100	100	100	100	100	100	100	100	100	88
89	98	100	100	100	100	93	97	100	89	90	100	91
88	96	100	100	100	100	100	99	98	100	100	99	87
74	75	71	71	73	89	—	—	—	—	—	—	83
—	—	—	—	—	—	82	79	83	79	76	92	72
68	61	64	60	79	82	88	87	94	94	96	96	96
100	100	100	100	100	100	100	100	100	100	100	95	84
87	89	91	89	97	98	75	81	93	97	80	83	79
96	80	84	91	77	75	87	85	84	87	93	81	94
97	95	100	100	100	100	100	100	100	100	100	100	84
90	85	91	77	81	82	—	—	—	—	—	—	90
—	—	—	—	—	—	100	100	100	100	100	89	84
79	86	100	97	94	100	89	91	80	86	86	96	90
88	90	92	91	92	91	93	93	94	93	93	93	87
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'120	'122	'110	'106	'103	'104	'106	'109	'110	'111	'116	'119	'113
'178	'182	'183	'169	'181	'185	'187	'187	'187	'180	'178	'175	'163
'156	'156	'165	'159	'151	'119	'116	'118	'118	'158	'166	'174	'165
'215	'207	'194	'194	'186	'180	'153	'143	'138	'142	'137	'121	'184
'128	'131	'130	'126	'127	'127	—	—	—	—	—	—	'125
—	—	—	—	—	—	'110	'108	'110	'111	'113	'118	'118
'101	'099	'094	'101	'100	'102	'099	'099	'095	'099	'102	'103	'104
'128	'128	'128	'128	'126	'132	'128	'122	'111	'105	'119	'120	'121
'140	'134	'151	'156	'141	'129	'125	'122	'133	'125	'128	'117	'132
'085	'083	'082	'081	'081	'071	'064	'063	'059	'055	'053	'051	'078
'077	'081	'079	'073	'076	'077	'075	'076	'077	'078	'081	'078	'068
'110	'104	'099	'094	'091	'089	—	—	—	—	—	—	'103
—	—	—	—	—	—	'138	'130	'129	'133	'113	'115	'136
'150	'162	'145	'141	'111	'148	'139	'137	'131	'125	'108	'113	'136
'124	'135	'125	'117	'114	'103	'109	'110	'108	'108	'107	'097	'112
'149	'144	'110	'142	'139	'135	'133	'130	'134	'131	'124	'122	'139
'157	'151	'150	'144	'143	'135	'124	'122	'119	'106	'103	'119	'142
'158	'162	'164	'162	'169	'169	'163	'161	'165	'164	'160	'160	'153
'167	'169	'166	'165	'168	'195	—	—	—	—	—	—	'179
—	—	—	—	—	—	'188	'180	'188	'174	'170	'190	'162
'155	'142	'147	'141	'170	'167	'177	'174	'168	'165	'170	'168	'192
'202	'197	'194	'191	'186	'192	'186	'186	'186	'185	'177	'170	'140
'142	'138	'110	'138	'143	'114	'109	'117	'121	'122	'099	'101	'101
'127	'098	'103	'113	'094	'091	'099	'091	'085	'083	'079	'069	'094
'105	'103	'101	'097	'095	'097	'099	'093	'092	'091	'088	'085	'119
'155	'141	'146	'131	'134	'133	—	—	—	—	—	—	'155
—	—	—	—	—	—	'094	'092	'086	'084	'104	'130	'119
'162	'168	'186	'180	'165	'167	'142	'135	'111	'109	'111	'112	'133
'143	'139	'138	'135	'134	'134	'129	'127	'125	'123	'121	'122	'133

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MARCH.	1	100	100	100	100	98	91	83	82	72	98	75
	2	100	100	100	94	100	81	94	87	100	98	97
	3	100	100	100	100	100	100	100	97	94	87	89
	4	94	97	100	97	88	88	84	80	89	97	95
	5	—	—	—	—	—	—	—	—	—	—	—
	6	91	100	91	84	82	88	82	80	84	65	71
	7	100	97	96	84	85	78	76	70	74	70	63
	8	83	75	79	78	73	70	64	71	76	76	86
	9	95	97	98	98	96	81	85	79	76	76	79
	10	90	93	93	91	81	97	70	68	74	62	72
	11	100	100	90	74	70	68	78	88	70	68	70
	12	—	—	—	—	—	—	—	—	—	—	—
	13	87	83	73	79	84	66	74	87	83	94	81
	14	94	89	80	86	77	82	84	85	87	76	91
	15	100	100	100	93	91	79	87	100	70	73	70
	16	100	100	91	90	84	74	73	74	72	72	77
	17	83	82	73	85	85	80	75	74	65	67	68
	18	80	84	58	62	64	65	63	73	79	90	93
	19	—	—	—	—	—	—	—	—	—	—	—
	20	100	100	100	90	84	88	82	96	99	100	97
	21	86	92	93	94	88	73	66	72	65	65	60
	22	90	90	83	76	72	71	77	77	77	73	80
	23	83	81	74	75	71	61	76	75	76	76	75
	24	84	77	71	72	65	77	82	85	77	79	81
	25	86	86	76	71	79	82	85	82	81	74	74
	26	—	—	—	—	—	—	—	—	—	—	—
	27	94	94	96	96	96	61	62	59	61	65	66
	28	96	94	90	65	67	63	64	64	65	73	69
	29	97	94	86	75	73	70	71	68	65	48	48
	30	80	75	75	69	74	74	76	80	71	68	69
	31	96	93	86	82	77	73	73	73	82	87	90
Hourly Means	92	92	87	84	82	77	77	79	77	77	77	80
Tension of the Vapour. MARCH.	1	In. '071	In. '067	In. '072	In. '076	In. '080	In. '084	In. '087	In. '092	In. '084	In. '105	In. '081
	2	'069	'071	'080	'083	'095	'090	'098	'102	'116	'112	'110
	3	'107	'108	'104	'107	'111	'126	'126	'128	'134	'128	'121
	4	'098	'098	'103	'110	'115	'113	'106	'117	'117	'118	'110
	5	—	—	—	—	—	—	—	—	—	—	—
	6	'105	'113	'100	'108	'115	'138	'123	'129	'119	'117	'128
	7	'104	'110	'127	'149	'168	'144	'176	'172	'187	'181	'161
	8	'178	'141	'188	'189	'199	'202	'187	'208	'213	'245	'217
	9	'123	'122	'129	'133	'155	'116	'125	'120	'120	'123	'125
	10	'087	'090	'089	'094	'094	'119	'101	'108	'134	'168	'120
	11	'097	'104	'109	'138	'113	'117	'148	'164	'157	'134	'138
	12	—	—	—	—	—	—	—	—	—	—	—
	13	'116	'117	'069	'166	'108	'099	'101	'121	'118	'110	'104
	14	'073	'068	'068	'074	'072	'075	'082	'080	'079	'166	'074
	15	'055	'057	'062	'062	'069	'063	'079	'066	'070	'074	'070
	16	'080	'084	'088	'103	'103	'100	'103	'117	'112	'115	'121
	17	'110	'114	'103	'116	'116	'112	'107	'106	'094	'099	'101
	18	'080	'107	'089	'106	'115	'124	'123	'118	'157	'170	'168
	19	—	—	—	—	—	—	—	—	—	—	—
	20	'159	'148	'173	'184	'169	'175	'168	'191	'201	'208	'209
	21	'214	'220	'219	'239	'248	'230	'220	'226	'226	'225	'202
	22	'154	'163	'164	'161	'158	'157	'171	'171	'169	'169	'177
	23	'162	'169	'152	'158	'161	'147	'188	'192	'184	'188	'181
	24	'152	'140	'150	'159	'154	'182	'195	'205	'176	'185	'192
	25	'183	'188	'192	'185	'188	'195	'202	'198	'208	'214	'213
	26	—	—	—	—	—	—	—	—	—	—	—
	27	'178	'178	'181	'163	'167	'152	'154	'152	'159	'164	'158
	28	'144	'149	'170	'144	'165	'173	'188	'180	'196	'212	'199
	29	'176	'198	'224	'224	'237	'235	'257	'263	'303	'225	'233
	30	'153	'167	'178	'174	'189	'180	'200	'201	'198	'198	'235
	31	'204	'216	'232	'270	'290	'314	'334	'352	'393	'468	'455
Hourly Means	'126	'131	'135	'140	'146	'146	'154	'161	'164	'169	'162	'162

UR.

9	10	11
3	4	5
98	75	88
98	97	100
87	89	74
97	95	94
—	—	—
65	71	74
70	63	77
76	86	94
76	79	81
62	72	64
68	70	79
—	—	—
94	81	84
76	91	100
73	70	68
72	77	68
67	68	70
90	93	94
—	—	—
100	97	99
65	60	66
75	80	79
76	75	76
79	81	88
74	74	76
—	—	—
65	66	68
73	69	72
48	48	53
68	69	72
87	90	95
—	—	—
77	77	80
In.	In.	In.
'105	'081	'060
'112	'110	'142
'128	'124	'100
'118	'110	'160
—	—	—
'117	'128	'159
'181	'161	'188
'215	'217	'204
'123	'125	'122
'168	'120	'167
'134	'138	'170
—	—	—
'120	'104	'105
'166	'074	'075
'074	'070	'066
'115	'121	'108
'099	'101	'103
'170	'172	'108
—	—	—
'208	'209	'212
'225	'202	'206
'169	'177	'168
'188	'181	'183
'185	'192	'189
'214	'213	'218
—	—	—
'164	'158	'154
'212	'199	'208
'225	'233	'256
'198	'235	'210
'468	'455	'441
—	—	—
'169	'162	'162

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
84	82	93	100	100	100	100	100	100	100	100	100	94
100	100	100	100	100	100	100	100	100	100	100	100	98
76	84	85	88	91	91	85	88	91	90	89	95	91
97	97	100	100	98	100	—	—	—	—	—	—	94
—	—	—	—	—	—	100	100	100	91	76	86	90
74	93	95	100	100	96	100	100	100	100	100	100	90
72	79	81	79	79	76	79	79	74	77	79	80	79
97	99	99	99	100	99	99	97	83	87	85	88	86
77	90	83	86	88	84	84	85	78	83	89	97	86
70	78	81	95	95	100	100	100	100	100	100	100	87
90	87	84	87	99	81	—	—	—	—	—	—	83
—	—	—	—	—	—	100	77	80	78	79	87	87
75	98	85	83	95	98	100	98	94	93	94	93	87
96	93	93	100	100	100	100	100	100	100	100	100	92
80	80	83	97	96	96	100	100	100	100	100	100	90
62	61	70	69	74	73	75	85	85	87	80	82	78
70	94	96	97	97	95	86	85	100	94	91	86	83
97	80	84	80	91	91	—	—	—	—	—	—	84
—	—	—	—	—	—	93	99	100	100	100	100	96
99	99	99	100	100	100	100	100	98	93	90	90	80
72	71	75	78	88	86	90	92	91	90	89	89	80
85	88	96	88	90	91	89	86	94	89	86	82	84
76	74	81	90	91	89	87	87	89	81	89	84	80
90	85	82	88	84	84	83	83	88	86	83	86	82
81	82	87	92	91	93	—	—	—	—	—	—	80
—	—	—	—	—	—	72	71	72	71	72	72	82
75	80	88	86	88	88	100	87	89	88	89	91	82
78	80	84	84	85	78	89	96	86	98	92	100	80
57	6	70	77	80	83	91	96	94	90	96	90	77
78	86	87	89	92	93	94	96	98	99	96	96	82
99	100	100	100	89	89	88	88	86	83	83	84	88
82	88	90	92	91	92	92	91	91	90	91	86	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'080	'075	'079	'068	'081	'080	'065	'051	'060	'069	'070	'072	'077
'095	'093	'093	'096	'095	'098	'103	'105	'108	'111	'111	'111	'097
'095	'099	'091	'091	'092	'090	'089	'091	'104	'104	'104	'100	'106
'100	'097	'101	'101	'101	'099	—	—	—	—	—	—	'106
—	—	—	—	—	—	'111	'115	'120	'104	'092	'109	'106
'136	'137	'122	'115	'115	'111	'102	'103	'103	'104	'102	'099	'117
'175	'186	'184	'185	'186	'181	'183	'183	'178	'178	'180	'178	'169
'201	'200	'197	'196	'200	'194	'189	'175	'138	'137	'131	'132	'187
'117	'133	'121	'125	'122	'115	'113	'113	'091	'096	'093	'098	'118
'107	'109	'107	'110	'109	'113	'113	'106	'103	'099	'096	'100	'105
'159	'145	'140	'144	'160	'137	—	—	—	—	—	—	'132
—	—	—	—	—	—	'172	'132	'128	'118	'113	'117	'132
'084	'105	'088	'088	'080	'080	'090	'085	'081	'079	'079	'077	'098
'064	'060	'060	'062	'062	'062	'062	'060	'058	'057	'058	'056	'071
'071	'067	'068	'074	'071	'069	'071	'070	'069	'067	'073	'076	'069
'095	'092	'102	'101	'108	'106	'107	'118	'116	'117	'110	'111	'105
'101	'120	'113	'113	'107	'109	'091	'087	'096	'096	'095	'094	'104
'172	'140	'149	'140	'155	'153	—	—	—	—	—	—	'138
—	—	—	—	—	—	'144	'135	'140	'138	'135	'133	'133
'216	'216	'212	'213	'207	'205	'208	'209	'215	'258	'252	'250	'202
'185	'163	'165	'164	'109	'164	'160	'161	'156	'155	'147	'147	'191
'172	'171	'179	'164	'164	'169	'165	'162	'172	'167	'165	'160	'166
'166	'155	'157	'155	'149	'142	'139	'137	'138	'130	'135	'130	'158
'185	'168	'165	'179	'174	'177	'180	'181	'185	'182	'180	'181	'175
'221	'223	'232	'237	'232	'235	—	—	—	—	—	—	'193
—	—	—	—	—	—	'158	'150	'148	'142	'140	'140	'157
'162	'163	'171	'164	'154	'152	'163	'144	'138	'138	'138	'138	'157
'210	'206	'211	'211	'213	'208	'207	'204	'203	'210	'195	'186	'191
'250	'210	'201	'194	'188	'182	'176	'173	'164	'160	'161	'153	'210
'212	'204	'208	'210	'215	'214	'214	'213	'213	'211	'208	'200	'200
'407	'367	'343	'338	'287	'225	'196	'192	'180	'179	'166	'167	'292
'157	'152	'150	'150	'146	'143	'140	'135	'134	'134	'131	'130	'146

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hour of Mean Göttingen Time	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. APRIL.	1	78	90	85	85	82	82	79	78	78	74	71	72
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	88	88	83	79	78	79	76	74	75	79	70	69
	4	87	90	93	93	92	92	94	94	98	94	94	96
	5	100	90	78	69	57	53	71	72	75	73	65	66
	6	78	84	68	65	59	58	68	64	64	62	62	49
	7	73	69	60	53	62	65	64	59	62	57	57	59
	8	80	78	56	54	50	55	54	55	54	51	51	50
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	86	77	56	60	57	62	55	50	47	52	52	54
	11	68	56	51	45	47	44	52	51	61	63	62	65
	12	93	83	67	66	63	64	68	58	57	57	60	69
	13	75	69	68	65	66	72	84	73	82	82	82	84
	14	90	91	89	86	75	72	69	74	79	79	80	82
	15	72	67	75	61	52	47	45	44	43	38	41	35
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	72	65	64	59	57	52	49	66	61	67	68	67
	18	55	59	63	61	61	60	65	64	92	100	100	98
	19	96	99	86	64	68	66	64	70	60	70	67	67
	20	87	78	51	63	64	66	69	60	71	68	70	67
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	76	76	73	67	70	67	61	62	68	72	66	65
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	61	61	61	71	72	71	55	50	50	48	50	44
	25	87	76	72	73	64	63	60	63	65	74	70	79
	26	86	70	66	61	64	66	62	60	54	55	59	58
	27	96	71	76	71	70	65	63	87	52	46	47	51
	28	79	38	72	74	68	63	64	53	47	52	64	68
	29	99	83	74	74	68	65	60	56	48	44	38	42
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	82	75	70	67	65	64	65	64	64	64	65	64	65
Tension of the Vapour. APRIL.	1	In. *151	In. *176	In. *165	In. *165	In. *165	In. *179	In. *170	In. *167	In. *168	In. *163	In. *150	In. *171
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	*166	*201	*209	*211	*222	*228	*220	*221	*224	*234	*232	*227
	4	*208	*245	*255	*268	*271	*271	*284	*285	*318	*300	*287	*275
	5	*184	*170	*157	*147	*135	*156	*202	*193	*198	*190	*168	*156
	6	*128	*159	*150	*177	*172	*180	*210	*202	*202	*203	*200	*174
	7	*152	*159	*157	*159	*196	*201	*192	*173	*181	*174	*169	*155
	8	*133	*157	*155	*170	*167	*187	*193	*195	*214	*210	*204	*172
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	*198	*230	*229	*303	*276	*341	*313	*305	*279	*286	*277	*259
	11	*214	*189	*188	*164	*173	*167	*191	*185	*219	*216	*202	*230
	12	*168	*196	*186	*219	*225	*234	*245	*236	*238	*226	*211	*217
	13	*165	*161	*163	*156	*169	*179	*208	*197	*205	*202	*199	*200
	14	*202	*213	*213	*226	*208	*203	*208	*245	*238	*239	*238	*207
	15	*181	*192	*228	*215	*208	*200	*203	*198	*195	*173	*180	*172
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	*139	*137	*140	*134	*144	*138	*138	*195	*182	*181	*189	*180
	18	*168	*112	*128	*126	*129	*135	*127	*115	*148	*161	*167	*157
	19	*167	*169	*156	*122	*144	*142	*155	*160	*145	*160	*152	*160
	20	*175	*138	*122	*159	*173	*185	*219	*197	*214	*215	*214	*224
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	*200	*201	*206	*197	*205	*199	*207	*218	*234	*226	*220	*211
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	*139	*132	*136	*178	*193	*196	*157	*139	*137	*133	*134	*145
	25	*137	*149	*154	*186	*172	*175	*180	*193	*196	*208	*203	*206
	26	*164	*151	*154	*151	*182	*191	*186	*180	*180	*172	*190	*181
	27	*158	*165	*207	*213	*20	*229	*221	*184	*204	*189	*184	*182
	28	*185	*151	*188	*158	*195	*191	*187	*163	*159	*183	*213	*216
	29	*207	*259	*211	*201	*196	*196	*197	*192	*168	*160*	*138	*141
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	*168	*174	*177	*185	*189	*195	*201	*197	*203	*201	*199	*197	

* Good Friday.

R.

9	10	11
3	4	5
74	71	72
—	—	—
79	70	69
94	94	96
73	65	66
62	62	49
57	57	49
51	51	50
—	—	—
52	52	54
63	62	65
57	60	61
82	82	84
79	80	82
38	41	35
—	—	—
67	68	67
100	100	98
70	67	67
68	70	67
—	—	—
72	66	65
—	—	—
48	50	44
74	70	79
55	59	58
46	47	51
52	64	68
44	38	42
—	—	—

65	61	65
----	----	----

In.	In.	In.
*163	*159	*161
—	—	—
*234	*232	*227
*300	*288	*273
*190	*168	*156
*203	*209	*171
*171	*163	*155
*210	*201	*192
—	—	—
*286	*180	*159
*216	*202	*190
*226	*201	*184
*202	*199	*188
*239	*208	*192
*173	*180	*172
—	—	—
*181	*189	*195
*161	*166	*170
*160	*162	*169
*245	*234	*224
—	—	—
*226	*220	*211
—	—	—
*133	*131	*115
*208	*203	*206
*172	*190	*181
*189	*181	*182
*183	*213	*215
160	*158	*151
—	—	—
*201	*199	*197

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
78	83	88	88	91	94	—	—	—	—	—	—	84	
73	73	72	76	75	69	90	85	88	92	93	96	76	
94	94	93	89	86	86	88	90	94	96	96	100	93	
63	84	84	81	86	86	88	87	89	93	90	89	79	
47	55	64	61	68	70	70	78	73	73	74	83	67	
64	65	81	81	86	66	79	78	79	77	78	81	69	
59	66	79	73	76	71	—	—	—	—	—	—	68	
—	—	—	—	—	—	93	87	84	91	86	86	62	
55	53	55	63	73	72	70	61	61	63	77	88	72	
61	73	70	69	81	84	68	75	88	90	96	94	67	
72	68	72	66	67	87	91	88	87	82	74	74	72	
95	91	88	88	90	93	91	92	94	94	94	92	83	
93	87	86	86	86	87	96	88	71	71	72	83	82	
35	45	50	55	57	59	—	—	—	—	—	—	57	
—	—	—	—	—	—	65	69	72	73	73	85	—	
61	74	71	71	70	69	56	75	68	68	66	58	65	
81	84	87	92	94	93	86	62	87	86	88	90	80	
70	73	78	74	73	90	91	99	100	80	87	95	79	
62	68	75	76	74	71	—	—	—	—	—	—	69	
—	—	—	—	—	—	66	56	61	69	71	76	—	
59	76	55	55	57	71	—	—	—	—	—	—	67	
—	—	—	—	—	—	59	62	68	72	74	72	—	
65	79	82	78	61	72	73	77	77	88	92	83	68	
82	73	70	74	74	51	56	77	76	79	86	87	72	
51	51	76	81	86	91	94	94	89	91	97	93	73	
60	64	59	71	79	80	82	88	91	91	88	84	72	
82	84	90	88	90	94	97	97	99	99	99	100	78	
42	52	57	60	65	73	—	—	—	—	—	—	—	
—	—	—	—	—	—	80	78	80	81	80	76	66	
67	71	74	75	77	79	79	80	81	82	83	85	73	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
*158	*159	*164	*164	*170	*168	—	*181	*168	*171	*173	*177	*171	
—	—	—	—	—	—	*219	*216	*219	*225	*224	*228	*220	
*226	*224	*223	*229	*219	*216	*189	*190	*181	*182	*184	*175	*172	
*229	*252	*238	*211	*195	*189	*147	*140	*139	*141	*143	*138	*135	
*162	*193	*177	*164	*165	*155	*153	*158	*153	*153	*153	*155	*163	
*157	*160	*168	*163	*179	*169	*153	*158	*153	*153	*153	*155	*170	
*188	*164	*176	*164	*177	*145	*155	*151	*155	*151	*152	*151	*165	
*231	*212	*213	*189	*192	*189	—	—	—	—	—	—	*192	
—	—	—	—	—	—	*221	*207	*195	*195	*188	*187	—	
*275	*258	*254	*230	*246	*232	*236	*224	*224	*231	*218	*219	*210	
*210	*232	*227	*241	*286	*285	*210	*194	*196	*177	*195	*161	*201	
*239	*222	*216	*218	*227	*256	*257	*251	*245	*221	*187	*180	*224	
*198	*204	*192	*194	*195	*197	*198	*199	*193	*203	*203	*203	*191	
*239	*216	*199	*195	*210	*208	*199	*179	*174	*175	*173	*197	*209	
*141	*155	*155	*162	*167	*165	—	—	—	—	—	—	—	
—	—	—	—	—	—	*165	*164	*158	*153	*148	*154	*157	
*196	*177	*167	*167	*164	*161	*135	*172	*154	*146	*135	*115	*137	
*156	*139	*143	*157	*155	*143	*127	*095	*124	*117	*119	*119	*133	
*163	*154	*147	*148	*128	*139	*136	*141	*138	*120	*128	*131	*146	
*199	*192	*191	*190	*178	*180	—	—	—	—	—	—	—	
—	—	—	—	—	—	*224	*200	*208	*209	*210	*202	*194	
*227	*224	*158	*147	*142	*150	—	—	—	—	—	—	—	
—	—	—	—	—	—	*121	*130	*146	*154	*156	*148	*186	
*173	*188	*180	*159	*130	*131	*127	*131	*131	*131	*133	*124	*147	
*208	*189	*181	*189	*185	*143	*160	*180	*163	*158	*155	*143	*176	
*147	*133	*182	*181	*186	*171	*162	*146	*140	*140	*142	*140	*165	
*194	*187	*174	*185	*185	*179	*181	*183	*189	*193	*192	*190	*191	
*245	*238	*242	*240	*253	*259	*265	*265	*207	*265	*263	*264	*217	
*142	*149	*150	*146	*151	*146	—	—	—	—	—	—	—	
—	—	—	—	—	—	*174	*166	*165	*161	*187	*184	*176	
*196	*193	*188	*185	*186	*182	*181	*177	*174	*173	*174	*171	*186	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	1	2	3	4	5	
Humidity of the Air. MAY.	1	80	81	80	82	78	77	86	92	91	93	92
	2	98	98	94	81	77	82	81	78	77	73	73
	3	88	87	76	75	68	66	60	59	52	54	41
	4	83	73	68	59	60	58	62	64	69	72	80
	5	89	84	85	79	77	72	72	68	66	68	83
	6	96	87	84	79	74	72	72	75	72	71	73
	7	—	—	—	—	—	—	—	—	—	—	—
	8	84	66	61	61	57	53	51	52	51	55	55
	9	82	65	67	64	62	66	63	59	61	67	65
	10	94	89	79	69	72	73	73	74	74	74	76
	11	93	93	84	77	76	67	70	75	83	84	72
	12	65	62	59	59	52	50	46	45	45	54	59
	13	76	79	86	87	97	98	98	87	87	83	75
	14	—	—	—	—	—	—	—	—	—	—	—
	15	76	65	54	55	55	58	61	59	61	67	68
	16	99	90	80	74	79	83	86	77	74	77	79
	17	97	84	82	80	75	72	69	67	70	66	62
	18	94	86	82	70	69	61	62	56	56	52	59
	19	90	87	81	78	75	74	73	75	74	73	91
	20	100	100	99	93	84	87	85	92	95	93	98
	21	—	—	—	—	—	—	—	—	—	—	—
	22	87	74	71	78	96	73	72	72	72	72	73
	23	82	83	77	67	66	66	68	70	72	73	73
	24	99	97	92	95	92	90	69	71	64	58	74
	25	90	92	87	83	81	75	74	72	70	54	57
	26	77	68	61	59	56	62	63	69	57	51	51
	27	81	80	75	72	70	74	74	68	64	57	60
	28	—	—	—	—	—	—	—	—	—	—	—
	29	92	87	89	89	83	87	89	81	79	80	77
	30	93	77	58	57	50	51	50	41	47	49	50
	31	63	63	58	55	51	52	37	44	36	37	40
Hourly Means	87	81	77	73	72	70	69	68	67	66	68	70
Tension of the Vapour. MAY.	1	In. .202	In. .219	In. .228	In. .260	In. .258	In. .262	In. .261	In. .266	In. .266	In. .281	In. .296
	2	.233	.262	.277	.294	.311	.311	.318	.322	.320	.303	.292
	3	.236	.327	.320	.332	.337	.338	.322	.300	.277	.313	.291
	4	.259	.251	.272	.281	.282	.282	.275	.267	.269	.282	.300
	5	.367	.432	.441	.492	.507	.509	.566	.498	.450	.477	.460
	6	.398	.438	.472	.478	.472	.514	.522	.528	.577	.525	.495
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.216	.204	.214	.248	.233	.231	.248	.241	.235	.231	.248
	9	.241	.251	.292	.268	.290	.309	.317	.324	.314	.305	.289
	10	.289	.293	.280	.265	.279	.283	.292	.300	.321	.305	.308
	11	.287	.287	.272	.269	.273	.255	.261	.258	.280	.280	.265
	12	.175	.181	.182	.198	.196	.182	.181	.186	.221	.232	.242
	13	.161	.185	.210	.214	.239	.262	.276	.286	.265	.238	.200
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.185	.206	.210	.224	.237	.269	.267	.264	.252	.244	.267
	16	.310	.348	.356	.352	.374	.402	.413	.387	.367	.365	.405
	17	.259	.322	.338	.319	.353	.372	.369	.379	.406	.393	.351
	18	.313	.406	.414	.416	.428	.396	.421	.407	.439	.415	.446
	19	.398	.411	.463	.491	.513	.559	.544	.569	.544	.540	.592
	20	.481	.481	.550	.629	.595	.608	.686	.632	.662	.613	.616
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.400	.316	.309	.390	.458	.389	.377	.380	.382	.384	.395
	23	.372	.333	.337	.285	.280	.291	.305	.327	.364	.371	.370
	24	.403	.407	.431	.482	.552	.571	.480	.532	.485	.463	.486
	25	.505	.421	.458	.458	.518	.526	.534	.523	.540	.472	.503
	26	.292	.279	.269	.274	.279	.331	.387	.433	.370	.313	.294
	27	.298	.313	.354	.384	.386	.405	.401	.407	.401	.354	.357
	28	—	—	—	—	—	—	—	—	—	—	—
	29	.455	.493	.493	.519	.581	—	.629	.621	.594	.631	.657
	30	.380	.377	.328	.328	.296	—	.324	.269	.257	.244	.216
	31	.177	.188	.180	.188	.188	—	.154	.186	.153	.162	.186
Hourly Means	.306	.320	.339	.347	.359	.366	.373	.372	.369	.359	.358	.362

JR.

9	10	11
3	4	5
91	93	92
77	73	73
54	50	41
69	72	80
68	67	83
72	71	73
—	—	—
51	55	55
67	69	65
72	74	76
84	81	72
54	56	59
77	83	75
—	—	—
67	68	90
77	79	89
66	63	62
52	54	39
73	91	93
93	96	98
—	—	—
72	72	73
73	76	73
58	62	74
54	38	37
51	51	51
57	58	60
—	—	—
80	91	77
49	50	50
37	39	40
66	68	70

In.	In.	In.
*284	*302	*296
*303	*292	*298
*313	*291	*243
*282	*275	*390
*477	*478	*460
*525	*479	*495
—	—	—
*231	*253	*248
*305	*326	*289
*305	*309	*308
*280	*287	*265
*221	*232	*242
*238	*223	*200
—	—	—
*244	*245	*297
*365	*383	*405
*393	*375	*351
*413	*421	*446
*514	*540	*592
*613	*584	*616
—	—	—
*384	*364	*395
*364	*371	*370
*463	*506	*486
*472	*563	*462
*313	*294	*300
*354	*373	*357
—	—	—
*631	*669	*657
*244	*232	*216
*162	*176	*186
*379	*358	*362

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
98	97	97	94	98	99	100	100	98	99	98	97	90
72	77	83	84	89	93	73	75	80	91	89	89	83
62	68	80	84	85	91	92	87	87	86	89	93	74
79	77	77	79	80	77	79	80	80	88	91	96	75
82	86	78	83	88	87	87	88	100	100	97	97	83
84	87	88	78	78	77	—	—	—	—	—	—	—
—	—	—	—	—	—	91	79	74	85	79	79	79
60	64	63	64	58	53	54	74	76	81	83	76	63
79	79	91	95	97	99	99	100	100	100	100	93	80
80	75	78	81	83	85	89	94	94	97	96	95	82
63	57	53	56	55	57	58	59	62	64	62	62	69
61	64	63	69	69	63	63	74	70	69	83	79	62
81	83	85	84	83	83	—	—	—	—	—	—	—
—	—	—	—	—	—	71	71	70	78	74	78	82
88	96	93	96	100	97	97	100	100	100	100	99	80
88	93	97	78	83	79	83	85	83	94	94	87	85
64	71	76	85	89	91	89	97	95	96	96	97	80
64	70	73	77	78	90	91	95	95	95	97	95	76
93	100	96	93	97	98	100	100	100	100	100	100	89
95	98	98	100	100	100	—	—	—	—	—	—	95
—	—	—	—	—	—	97	99	98	97	95	92	—
77	81	90	79	79	89	96	92	91	92	83	82	81
74	70	68	69	64	64	80	85	91	89	97	95	76
72	76	79	82	86	86	83	94	96	96	97	91	83
54	60	62	64	66	61	72	72	83	92	80	90	72
49	57	67	53	64	70	73	74	79	74	76	77	64
65	73	75	86	86	82	—	—	—	—	—	—	78
—	—	—	—	—	—	92	99	97	96	97	96	—
77	80	76	83	90	88	86	86	86	88	91	95	85
49	53	61	61	64	65	62	70	62	59	69	75	59
45	47	76	82	87	76	69	79	80	84	84	82	61
72	76	79	79	81	81	82	85	87	89	89	88	77
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*284	*264	*252	*234	*237	*232	*233	*223	*213	*216	*212	*213	*247
*284	*266	*252	*235	*232	*225	*237	*244	*236	*231	*211	*227	*268
*290	*276	*280	*270	*253	*253	*266	*242	*240	*239	*229	*221	*280
*310	*314	*326	*327	*331	*325	*317	*310	*311	*325	*327	*315	*297
*418	*335	*439	*452	*390	*390	*379	*377	*364	*349	*326	*316	*426
*436	*480	*482	*433	*417	*387	—	—	—	—	—	—	*405
—	—	—	—	—	—	*282	*196	*180	*186	*185	*189	—
*243	*239	*229	*223	*215	*207	*201	*232	*218	*208	*210	*200	*226
*216	*310	*332	*330	*330	*321	*291	*272	*298	*303	*302	*268	*501
*302	*286	*286	*282	*280	*289	*296	*305	*303	*304	*300	*300	*294
*234	*209	*189	*191	*181	*180	*180	*177	*175	*163	*162	*162	*229
*234	*215	*185	*177	*173	*147	*141	*142	*138	*140	*149	*154	*182
*196	*210	*219	*220	*220	*219	—	—	—	—	—	—	—
—	—	—	—	—	—	*187	*167	*148	*150	*145	*157	*208
*284	*309	*281	*292	*301	*299	*304	*316	*319	*319	*315	*317	*273
*281	*369	*344	*299	*280	*255	*246	*228	*219	*223	*208	*204	*322
*215	*313	*316	*320	*312	*305	*309	*315	*306	*286	*279	*279	*330
*458	*417	*374	*354	*346	*351	*343	*338	*334	*334	*341	*349	*387
*586	*521	*428	*457	*472	*472	*464	*458	*456	*450	*434	*443	*491
*602	*609	*513	*450	*466	*500	—	—	—	—	—	—	—
—	—	—	—	—	—	*489	*488	*483	*477	*461	*439	*548
*380	*364	*364	*344	*322	*372	*368	*379	*375	*373	*351	*350	*368
*360	*319	*308	*322	*301	*295	*345	*359	*358	*359	*341	*343	*341
*436	*431	*406	*381	*392	*384	*367	*369	*367	*351	*351	*369	*433
*389	*371	*338	*293	*291	*262	*287	*280	*300	*306	*258	*280	*388
*287	*291	*282	*210	*247	*250	*252	*252	*252	*242	*242	*246	*286
*408	*395	*326	*335	*332	*323	—	—	—	—	—	—	—
—	—	—	—	—	—	*408	*407	*403	*400	*305	*382	*369
*666	*592	*504	*461	*450	*398	*358	*347	*331	*331	*317	*314	*498
*204	*203	*212	*210	*222	*223	*197	*199	*186	*174	*187	*198	*250
*194	*198	*265	*267	*247	*230	*246	*218	*206	*209	*202	*205	*201
*352	*339	*324	*309	*305	*300	*296	*291	*288	*285	*276	*278	*328

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JUNE.	1 73	56	51	47	42	36	37	29	48	54	57	57
	2 83	77	74	74	71	67	62	60	58	58	63	64
	3 89	92	92	90	88	87	85	83	78	77	81	85
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 92	81	83	81	80	75	73	86	83	86	69	75
	6 88	83	81	78	75	72	64	65	61	62	57	55
	7 72	67	63	61	57	56	56	51	49	49	50	49
	8 71	70	66	66	75	74	75	74	77	75	71	80
	9 89	77	100	81	74	72	66	62	60	61	63	72
	10 87	92	62	62	67	68	69	71	67	77	72	72
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 66	57	48	45	38	34	37	39	39	44	42	40
	13 61	45	46	38	36	31	30	28	23	26	27	27
	14 81	79	80	76	71	63	67	80	70	59	66	69
	15 90	81	83	82	75	48	46	41	36	34	31	31
	16 79	72	66	62	58	69	47	63	58	56	62	63
	17 89	83	77	76	72	68	68	72	78	66	75	71
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 99	98	83	85	86	85	81	73	82	85	82	84
	20 95	96	83	77	79	86	89	82	80	78	77	87
	21 90	89	92	89	76	76	71	69	65	62	59	61
	22 91	86	79	81	85	80	78	73	75	72	72	78
	23 99	100	100	99	96	94	84	80	54	63	49	65
	24 83	75	65	57	45	42	36	31	30	32	26	25
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 91	78	68	74	70	66	64	60	58	55	58	59
	27 88	87	79	74	75	77	75	77	71	72	72	71
	28 99	100	91	96	89	90	73	75	69	73	67	59
	29 78	74	72	74	73	71	70	72	71	71	66	72
	30 89	82	81	81	79	71	69	52	57	62	60	61
Hourly Means	85	80	76	73	70	68	64	63	61	62	61	63
Tension of the Vapour. JUNE.	In. 230	In. 205	In. 204	In. 197	In. 182	In. 174	In. 189	In. 156	In. 254	In. 287	In. 313	In. 328
	2 280	329	359	390	411	424	418	419	417	409	398	385
	3 560	560	560	581	583	581	590	580	575	571	577	565
	4 —	—	—	—	—	—	—	—	—	—	—	—
	5 596	597	564	572	568	579	578	538	519	506	576	549
	6 591	594	593	595	589	589	583	522	566	576	556	542
	7 550	534	536	544	552	566	587	576	578	584	572	562
	8 576	511	542	561	538	549	537	535	549	560	581	572
	9 573	501	540	597	582	592	585	572	573	592	518	564
	10 545	581	595	535	507	585	588	517	511	534	576	549
	11 —	—	—	—	—	—	—	—	—	—	—	—
	12 222	261	178	173	161	144	164	174	176	201	193	179
	13 192	155	176	152	162	161	157	151	127	141	148	145
	14 237	255	278	314	310	341	333	363	378	366	408	399
	15 574	531	640	668	702	594	578	549	510	492	433	423
	16 621	624	644	659	667	766	593	706	686	681	655	655
	17 571	617	675	665	717	728	740	692	688	695	679	666
	18 —	—	—	—	—	—	—	—	—	—	—	—
	19 574	596	592	664	676	708	711	680	651	659	676	648
	20 524	571	592	598	638	630	674	615	605	579	597	586
	21 538	497	589	517	478	463	464	466	440	436	443	434
	22 546	532	512	551	539	531	541	550	528	518	509	505
	23 518	514	572	584	625	672	636	665	497	486	381	354
	24 507	467	390	346	304	302	269	243	239	260	203	197
	25 —	—	—	—	—	—	—	—	—	—	—	—
	26 494	514	580	615	633	628	643	629	613	589	608	595
	27 453	533	573	608	626	626	649	675	654	638	657	652
	28 682	667	689	706	677	657	535	544	516	554	508	441
	29 401	443	503	564	559	538	551	578	586	590	570	573
	30 433	447	540	551	571	575	541	489	520	563	543	568
Hourly Means	413	434	463	478	487	488	478	475	464	471	461	447

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
54	57	57	60	59	71	75	79	84	90	88	88	85	83	88	64
58	63	64	66	74	81	79	84	82	80	90	92	93	93	93	76
77	81	85	84	81	90	94	95	97	—	—	—	—	—	—	87
—	—	—	—	—	—	—	—	—	81	82	83	83	90	97	84
86	69	75	85	82	77	78	90	89	84	96	90	94	96	91	74
62	57	55	56	59	62	64	65	90	90	88	86	89	96	97	59
49	50	49	50	44	53	55	54	56	59	66	77	69	73	74	82
75	71	80	79	82	88	88	90	93	94	95	95	97	97	97	70
61	63	72	76	72	59	58	57	56	60	61	59	82	82	82	73
77	72	72	74	59	67	75	77	73	—	—	—	—	—	—	55
—	—	—	—	—	—	—	—	—	75	74	76	79	81	79	50
44	42	40	41	45	51	71	69	64	84	86	72	72	72	71	79
26	27	27	32	39	40	41	57	77	78	86	87	80	80	79	63
59	66	69	70	84	84	84	86	87	87	87	92	94	91	95	74
34	31	31	39	41	71	72	75	82	84	80	77	58	76	87	83
56	62	60	58	67	68	86	88	89	90	91	96	95	96	96	88
66	75	71	78	81	87	80	89	89	—	—	—	—	—	—	89
—	—	—	—	—	—	—	—	—	96	98	99	99	99	100	78
85	82	84	82	88	92	94	90	85	86	93	94	93	95	87	82
78	77	87	89	89	94	96	96	97	92	95	96	96	92	97	86
62	59	61	54	61	65	65	83	89	93	90	90	94	96	96	82
72	72	78	75	78	82	79	81	87	89	100	91	96	97	95	82
63	49	65	67	69	76	78	85	82	87	87	88	91	92	90	57
32	26	25	28	36	45	46	56	64	—	—	—	—	—	—	77
—	—	—	—	—	—	—	—	—	85	91	94	97	96	91	86
55	58	59	61	71	79	81	85	87	94	96	95	96	96	97	82
72	72	71	78	80	94	98	97	96	98	100	100	100	100	98	82
73	67	59	66	70	73	77	77	79	89	87	90	93	96	91	78
71	66	72	79	82	95	97	95	93	97	97	96	95	96	86	82
62	60	61	71	74	79	72	88	86	94	98	96	88	88	86	78
62	61	63	65	68	74	76	76	83	86	89	89	89	90	90	75
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
287	313	328	303	288	266	239	255	267	264	260	249	247	227	236	243
409	398	425	424	437	440	392	439	463	470	470	444	464	490	533	423
571	577	596	547	485	500	486	476	449	—	—	—	—	—	—	511
—	—	—	—	—	—	—	—	—	429	431	431	425	375	344	384
496	473	419	385	378	328	326	338	323	297	298	283	280	284	288	262
276	256	232	232	227	229	233	267	265	251	238	230	227	264	288	218
284	272	270	270	221	235	218	214	216	225	238	254	237	244	248	390
460	481	393	393	398	403	400	398	389	390	355	345	338	323	325	428
492	518	509	509	447	373	366	348	334	341	336	318	387	378	385	403
534	476	533	533	414	402	417	362	315	—	—	—	—	—	—	187
—	—	—	178	176	181	210	196	193	213	198	210	234	232	224	179
201	193	179	178	171	173	170	207	233	234	237	230	205	203	198	348
141	148	145	149	171	176	192	365	355	353	312	335	329	312	340	553
366	408	404	366	477	615	547	535	572	582	623	602	517	552	585	620
492	433	423	493	652	622	602	604	595	575	546	540	507	478	482	621
681	655	655	601	594	567	540	557	552	—	—	—	—	—	—	591
695	679	646	607	598	572	564	543	523	525	513	488	472	478	476	520
—	—	—	521	502	513	508	492	465	425	422	385	374	385	400	419
659	676	648	387	396	370	360	384	379	363	358	361	366	371	386	485
579	597	576	457	463	446	427	430	430	415	470	473	478	512	508	477
436	443	414	436	409	403	397	402	377	400	405	403	403	395	390	314
518	509	476	206	237	234	226	229	247	—	—	—	—	—	—	535
486	384	364	—	—	—	—	—	—	443	442	423	431	428	432	613
260	203	197	589	608	641	471	453	477	499	496	477	428	428	466	612
—	—	—	638	657	644	665	634	645	570	573	623	621	632	676	612
—	—	—	554	508	474	485	472	450	446	415	390	395	397	392	487
—	—	—	590	570	579	542	568	461	429	410	405	389	362	344	526
563	543	568	585	559	566	523	600	578	563	550	528	468	413	341	434
471	461	447	445	429	424	404	405	401	403	401	391	382	381	386	

DIRECTION AND FORCE OF THE WIND.

Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
JANUARY.	1	E.	1 ^h 5	E.	1 ^h 5	E.	1 ^h 5	E.	1 ^h 5	E.	1 ^h 5	E.
	2	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	3	N.W.	0 ^h 5	N.W.	0 ^h 2	W.N.W.	0 ^h 2	N.W. by W.	0 ^h 2	S.W. by S.	0 ^h 5	S.W. by S.
	4	—	—	—	—	—	—	—	—	—	—	—
	5	S.W.	0 ^h 2	S.W.	0 ^h 2	—	0 ^h 0	S.W. by S.	0 ^h 2	S.W.	0 ^h 2	W. by S.
	6	N. by E.	0 ^h 2	N.E.	0 ^h 2	N.N.E.	0 ^h 2	E.N.E.	0 ^h 2	N.E.	0 ^h 2	N.E.
	7	E.	3 ^h 0	E.	3 ^h 0	E.	2 ^h 5	E. by N.	2 ^h 0	E.	1 ^h 0	E.
	8	—	0 ^h 0	W.S.W.	0 ^h 5	W.S.W.	0 ^h 5	W.S.W.	0 ^h 5	W. by S.	0 ^h 5	W. by S.
	9	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	N.W. by N.	0 ^h 5	W.N.W.	0 ^h 5	N.N.W.
	10	S.W.	0 ^h 5	S.W.	0 ^h 5	S.W. by W.	0 ^h 5	S.W. by W.	0 ^h 5	S.W. by W.	0 ^h 5	S.W. by W.
	11	—	—	—	—	—	—	—	—	—	—	—
	12	—	0 ^h 0	—	0 ^h 0	N.N.W.	0 ^h 2	N.N.W.	0 ^h 5	N.N.W.	0 ^h 5	N.N.W.
	13	—	0 ^h 0	—	0 ^h 0	N.W.	0 ^h 2	N.	0 ^h 2	W.	0 ^h 2	W.N.W.
	14	S.W.	1 ^h 0	S.W.	1 ^h 0	S.W.	1 ^h 0	S.W.	1 ^h 0	S.W. by W.	0 ^h 5	S.W. by W.
	15	—	0 ^h 0	S.S.W.	0 ^h 2	S.S.W.	0 ^h 2	S. by W.	0 ^h 2	S. by W.	0 ^h 2	S. by W.
	16	N. by W.	0 ^h 2	N. by W.	0 ^h 2	N. by W.	0 ^h 2	N.N.E.	0 ^h 2	N. by W.	0 ^h 2	N. by W.
	17	N.	0 ^h 2	N. by W.	0 ^h 2	N. by W.	0 ^h 2	N.	0 ^h 2	N. by W.	0 ^h 2	N.W. by N.
	18	—	—	—	—	—	—	—	—	—	—	—
	19	N. by W.	0 ^h 2	N. by W.	0 ^h 2	N. by W.	0 ^h 2	N.	0 ^h 2	N.	0 ^h 2	N. by W.
	20	N. by E.	0 ^h 2	N. by E.	0 ^h 2	N. by E.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	—
	21	N.N.E.	1 ^h 0	N.E.	1 ^h 0	N.E.	1 ^h 0	N.E.	1 ^h 0	N.N.E.	1 ^h 0	N.N.E.
	22	N.N.W.	1 ^h 0	N.N.W.	1 ^h 5	N.N.W.	—	N.N.W.	—	N.N.W.	2 ^h 5	N.N.W.
	23	—	0 ^h 0	—	0 ^h 0	W. by S.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	S.W.
	24	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	27	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	N.	0 ^h 2	—	0 ^h 0	—
	28	—	0 ^h 0	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W. by W.	0 ^h 5	S.W. by W.	0 ^h 2	W. by S.
	29	E.S.E.	0 ^h 2	E. by S.	0 ^h 2	E.S.E.	0 ^h 2	E.S.E.	0 ^h 2	E.S.E.	0 ^h 2	E.S.E.
	30	E.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	31	N. by W.	3 ^h 0	N. by W.	3 ^h 5	N. by W.	3 ^h 5	N. by W.	3 ^h 5	N. by W.	2 ^h 5	N. by W.

(continued)

Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
JANUARY.	1	E.	1 ^h 5	E.	1 ^h 0	E.	1 ^h 0	E.	0 ^h 5	E.	0 ^h 5	E.S.E.
	2	W. by N.	1 ^h 0	W. by N.	0 ^h 5	W.	0 ^h 5	W.	0 ^h 5	W.	1 ^h 5	W.
	3	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	4	—	—	—	—	—	—	—	—	—	—	—
	5	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	6	E.N.E.	1 ^h 0	E.N.E.	1 ^h 5	E.N.E.	2 ^h 5	E.N.E.	2 ^h 5	E.N.E.	2 ^h 5	E.N.E.
	7	N.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.	0 ^h 2	S.W.
	8	W.N.W.	1 ^h 0	W.N.W.	0 ^h 2	W.N.W.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	—
	9	—	0 ^h 0	W.N.W.	0 ^h 2	W.N.W.	0 ^h 2	N.W. by W.	0 ^h 2	—	0 ^h 0	—
	10	S.W.	1 ^h 5	S.W.	1 ^h 0	W.S.W.	0 ^h 5	S.W.	0 ^h 5	S.W.	0 ^h 5	S.W.
	11	—	—	—	—	—	—	—	—	—	—	—
	12	N.W. by N.	0 ^h 2	N.W.	0 ^h 5	N.N.W.	0 ^h 5	N.W. by N.	0 ^h 2	N.W.	0 ^h 2	N.W.
	13	—	0 ^h 0	—	0 ^h 0	S.W.	1 ^h 0	S.W.	1 ^h 5	S.W.	0 ^h 2	—
	14	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	S.S.W.	0 ^h 2	—	0 ^h 0	—
	15	W.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	16	N. by W.	0 ^h 5	N. by W.	0 ^h 5	N. by W.	0 ^h 5	N.	0 ^h 5	N. by W.	0 ^h 5	N. by W.
	17	N.W.	2 ^h 0	N.N.W.	2 ^h 5	N.W. by N.	1 ^h 5	N.W.	0 ^h 5	—	0 ^h 0	—
	18	—	—	—	—	—	—	—	—	—	—	—
	19	—	0 ^h 0	N.E.	0 ^h 2	N.N.E.	0 ^h 2	N.N.E.	0 ^h 2	N. by E.	0 ^h 2	N. by E.
	20	—	0 ^h 0	—	0 ^h 0	E. by N.	0 ^h 2	E. by N.	0 ^h 2	N.N.E.	0 ^h 2	—
	21	N. by W.	0 ^h 5	N.	0 ^h 5	N.	3 ^h 0	N. by W.	2 ^h 5	N. by W.	3 ^h 0	N.N.W.
	22	N.W. by N.	2 ^h 0	N.W. by N.	1 ^h 5	N.W. by N.	1 ^h 5	N.W. by N.	1 ^h 5	N.W. by N.	0 ^h 5	N.W. by N.
	23	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	W.S.W.	0 ^h 2	W.S.W.	0 ^h 2	W.S.W.
	24	S.W.	1 ^h 0	S.W.	1 ^h 0	S.W.	1 ^h 0	S.W.	1 ^h 5	S.W.	0 ^h 5	S.W.
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	0 ^h 0	N.E. by E.	0 ^h 5	N.N.E.	0 ^h 5	—	0 ^h 0	—	0 ^h 0	N.N.E.
	27	—	0 ^h 0	S.S.W.	0 ^h 2	S.S.W.	0 ^h 2	S.W.	0 ^h 2	S.W. by W.	0 ^h 5	S.W. by W.
	28	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	—
	29	E. by N.	0 ^h 2	E. by N.	0 ^h 2	E.	0 ^h 2	E.S.E.	0 ^h 5	E.S.E.	0 ^h 2	—
	30	—	0 ^h 0	—	0 ^h 0	—	0 ^h 0	N.W.	0 ^h 2	N.N.W.	0 ^h 5	N. by W.
	31	N.E. by N.	0 ^h 2	N.N.E.	0 ^h 2	N.N.E.	0 ^h 2	—	0 ^h 0	—	0 ^h 0	—

DIRECTION AND FORCE OF THE WIND.															Mean Göttingen Time.
5 ^h .		6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .			
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
1 ⁵	E.	1 ⁵	E.	1 ⁵	E.	1 ⁵	E.	1 ⁵	E.	1 ⁵	E.	2 ⁵	E.	2 ⁰	
0 ⁵	S.W. by S.	2 ⁰	S.W. by S.	2 ⁵	S.W.	1 ⁰	S.W.	0 ⁵	S.W.	0 ⁵	S.W.	0 ⁵	S.W. by W.	0 ²	
0 ⁰	W. by S.	0 ²	W. by S.	0 ²	W.	0 ²	W.N.W.	0 ²	W.N.W.	0 ²	W.	0 ²	—	0 ⁰	
0 ²	W. by S.	0 ²	W.	0 ²	W.	0 ²	S.S.W.	0 ²	S. by W.	0 ²	—	0 ⁰	—	0 ⁰	
0 ²	N.E.	0 ²	N.E.	0 ²	N.E. by N.	0 ⁵	E.N.E.	0 ⁵	N.E. by E.	0 ⁵	E.N.E.	0 ⁵	E.N.E.	1 ⁰	
1 ⁰	E.	1 ⁰	E.	1 ⁰	E.	1 ⁰	E.	0 ⁵	E.	0 ⁵	N.N.E.	0 ⁵	N. by E.	0 ²	
0 ⁵	W. by S.	0 ⁵	W. by S.	0 ⁵	W.	1 ⁵	W.	0 ⁵	W. by N.	1 ⁰	W. by N.	1 ⁰	W. by N.	1 ⁰	
0 ⁵	N.N.W.	0 ⁵	N.N.W.	0 ⁵	N.W. by W.	0 ⁵	N.W. by W.	0 ²	W.S.W.	0 ²	W.S.W.	0 ²	—	0 ⁰	
0 ⁵	S.W. by W.	1 ⁰	W.S.W.	1 ⁵	W.S.W.	1 ⁰	S.W.	1 ⁰	S.W.	2 ⁰	S.W.	2 ⁵	S.W.	2 ⁵	
0 ⁵	N.N.W.	0 ⁵	N.W.	0 ²	N.	0 ²	N. by W.	0 ²	N.	0 ²	N.W. by N.	0 ²	N.W. by N.	0 ²	
0 ²	W.N.W.	0 ²	W. by N.	0 ⁵	W.	0 ⁵	W.	0 ⁵	W. by N.	0 ⁵	W. by S.	0 ²	W. by S.	0 ²	
0 ⁵	S.W. by W.	0 ²	W.S.W.	0 ⁵	W.S.W.	0 ⁵	W. by S.	0 ⁵	W.	0 ²	W.S.W.	0 ²	—	0 ⁰	
0 ²	S. by W.	0 ²	S. by W.	0 ²	S. by W.	0 ²	S.W.	0 ⁵	S.W.	0 ²	S.W.	0 ²	—	0 ⁰	
0 ²	N. by W.	0 ²	N.N.W.	0 ²	N.N.W.	0 ²	N. by W.	0 ²	N. by W.	0 ⁵	N.	0 ⁵	N.	0 ⁵	
0 ²	N.W. by N.	1 ⁰	N.N.W.	2 ⁵	N.N.W.	2 ⁵	N.N.W.	2 ⁰	N.N.W.	1 ⁵	N.N.W.	2 ⁵	N.N.W.	2 ⁵	
0 ²	N. by W.	0 ²	N.	0 ²	N.	0 ²	N. by E.	0 ²	N. by E.	0 ²	—	0 ⁰	N.E.	0 ²	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
1 ⁰	N.N.E.	1 ⁰	N.N.E.	1 ⁰	N.N.E.	0 ⁵	N.	0 ⁵	N. by W.	0 ⁵	N. by W.	0 ⁵	N. by W.	1 ⁰	
2 ⁵	N.N.W.	2 ⁵	N.N.W.	2 ⁵	N.W. by N.	2 ⁵	N.N.W.	1 ⁵	N.W.	2 ⁰	N.W.	2 ⁵	N.W.	3 ⁵	
0 ⁰	S.W.	0 ²	S.S.W.	0 ²	S.S.W.	0 ²	S.W. by S.	0 ²	S.S.W.	0 ²	S.W.	0 ²	—	0 ⁰	
0 ²	S.W.	0 ⁵	S.W.	0 ⁵	S.W.	1 ⁵	S.W.	2 ⁵	S.W.	1 ⁵	S.S.W.	1 ⁰	S.S.W.	1 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ²	W. by S.	0 ⁵	W. by S.	0 ⁵	S.	0 ²	S. by W.	0 ²	S. by W.	0 ²	S.S.W.	0 ²	—	0 ⁰	
0 ²	E.S.E.	0 ²	E.S.E.	0 ²	W. by S.	0 ⁵	W.S.W.	0 ²	W.S.W.	0 ²	S.W.	0 ²	S.W.	0 ²	
0 ⁰	—	0 ⁰	—	0 ⁰	E.N.E.	0 ²	E.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	
2 ⁵	N. by W.	2 ⁰	N.	1 ⁰	N.	0 ⁵	N. by E.	0 ⁵	N.	0 ⁵	N.N.E.	0 ⁵	N.E.	0 ²	

DIRECTION AND FORCE OF THE WIND.															Mean Göttingen Time.
17 ^h .		18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .			
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0 ⁵	E.S.E.	0 ⁵	E.S.E.	0 ²	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
1 ⁵	W.	1 ⁰	W.	1 ⁰	W.N.W.	3 ⁰	N.W.	2 ⁰	N.W.	1 ⁰	N.W.	1 ⁰	N.W.	1 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
2 ⁵	E.N.E.	3 ⁵	E.N.E.	4 ⁰	N.N.E.	0 ²	N. by E.	0 ²	N. by E.	0 ²	N. by E.	0 ²	N. by E.	0 ²	
0 ²	S.W.	0 ²	W.S.W.	0 ²	E.N.E.	4 ⁰	E.N.E.	4 ⁰	E.N.E.	3 ⁵	E.N.E.	3 ⁵	E.N.E.	3 ⁵	
0 ⁰	—	0 ⁰	—	0 ⁰	W. by S.	0 ²	W.S.W.	0 ²	S.W.	0 ²	W. by S.	0 ²	W. by S.	0 ²	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁵	S.W.	0 ⁵	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	S.W. by W.	0 ⁵	S.W. by W.	0 ²	
—	—	—	N.W. by N.	0 ⁵	N.W. by N.	0 ⁵	N.N.W.	0 ⁵	N. by W.	0 ⁵	N. by W.	0 ⁵	—	0 ⁰	
0 ²	N.W.	0 ²	N.W.	0 ²	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁰	—	0 ⁰	S.W.	0 ²	—	0 ⁰	S.W. by S.	1 ⁵	S.W. by S.	1 ⁵	S.W. by S.	2 ⁰	S.W.	2 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	—	—	0 ⁰	
0 ⁰	W.N.W.	0 ²	N. by W.	0 ²	N.	0 ²	N. by E.	0 ²	N.	0 ²	N. by E.	0 ²	W. by S.	0 ²	
0 ⁵	N. by W.	0 ⁵	N.	0 ⁵	—	0 ⁰	N. by W.	0 ²	N. by W.	0 ²	—	0 ⁰	N. by W.	0 ²	
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	0 ⁰	
0 ²	N. by E.	0 ²	N.	0 ⁵	N.	0 ⁵	N.	0 ²	N. by W.	0 ²	N. by W.	0 ²	N. by W.	0 ²	
0 ²	—	0 ⁰	N. by E.	0 ²	N.	0 ²	N.	0 ²	N. by E.	0 ²	N. by E.	0 ²	N. by E.	0 ²	
3 ⁰	N.N.W.	2 ⁵	N.N.W.	2 ⁰	N.E.	0 ⁵	N.N.E.	0 ⁵	N.N.E.	0 ⁵	N.N.E.	0 ⁵	N.N.E.	1 ⁰	
0 ⁵	N.W. by N.	0 ²	N.N.W.	2 ⁵	N. by W.	2 ⁵	N.	1 ⁵	N.N.W.	2 ⁵	N.	1 ⁵	N.N.W.	1 ⁰	
0 ²	W.S.W.	0 ⁵	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁵	S.W.	0 ⁵	S.W. by W.	0 ²	—	0 ⁰	S.W. by W.	0 ²	S.W.	0 ⁵	W.S.W.	0 ⁵	S.W.	0 ²	
—	—	—	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	—	—	0 ⁰	
0 ⁰	N.N.E.	0 ²	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ⁵	S.W. by W.	0 ⁵	S.W. by W.	0 ⁵	S.W. by W.	0 ²	S.W. by W.	0 ²	S.W. by W.	0 ²	S.W. by W.	0 ²	—	0 ⁰	
0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	
0 ²	—	0 ⁰	—	0 ⁰	S. by E.	0 ²	—	0 ⁰	—	0 ⁰	E.S.E.	0 ²	E.S.E.	0 ²	
0 ⁵	N. by W.	3 ⁰	N. by W.	2 ⁵	N. by W.	3 ⁰	N. by W.	3 ⁰	N. by W.	3 ⁰	N. by W.	3 ⁰	N. by W.	2 ⁰	
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	0 ⁰	

JANUARY.

JANUARY.

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
0'2	S.W.	0'2	S.S.W.	0'2	S.W.	0'2	S.S.W.	0'5	S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	2
0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	W. by S.	0'2	3
0'2	S.S.W.	0'5	S.S.W.	0'5	S. by W.	0'5	S.	0'5	S. by W.	0'5	S.S.W.	3'0	S.S.W.	2'5	4
2'5	W.N.W.	4'0	W.N.W.	3'0	W.N.W.	2'5	W.N.W.	2'5	W.N.W.	1'5	W.N.W.	1'5	W.N.W.	2'0	5
0'0	—	0'0	—	0'0	S.	0'2	S.	0'2	S.	0'2	S.S.E.	0'2	S.	0'2	6
0'2	S. by W.	0'2	S. by W.	0'5	S.S.W.	1'0	S.W. by S.	1'5	S.W.	0'5	S.W.	0'5	S.W.	0'2	7
2'0	N.N.W.	2'5	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'2	N.	0'2	8
0'0	N.E.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	1'0	E.	1'0	E.	1'0	9
0'5	N.E.	0'5	N.E.	0'5	N.E.	0'5	N.E. by N.	0'5	N.E. by N.	0'2	N.N.E.	0'5	N.	0'5	10
0'0	—	0'0	—	0'0	W.	0'2	W.N.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	11
0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	W.S.W.	0'2	W.	0'2	—	0'0	12
0'0	—	0'0	E.	0'2	E.	0'2	—	0'0	N.E.	0'2	N.E.	0'2	N.E.	2'0	13
0'2	E.S.E.	0'2	E.S.E.	0'5	E. by S.	0'5	E.	0'2	E.	0'5	E.	0'5	N.E.	0'2	14
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.E.	0'2	15
0'0	N.W. by N.	0'2	W.N.W.	0'2	W.N.W.	0'2	N.	0'2	N.	0'2	S.	0'2	—	0'0	16
2'0	E.	2'5	E.	3'5	E.	3'5	E.	3'5	E.N.E.	3'5	E.N.E.	4'5	E.	4'5	17
3'0	E.S.E.	3'0	E. by S.	1'0	E.S.E.	0'2	E. by S.	0'2	—	0'0	—	0'0	—	0'0	18
2'0	W.S.W.	2'0	S.W.	2'5	S.S.W.	3'0	S.W.	3'0	S.W.	3'0	W.S.W.	2'0	S.W.	2'5	19
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20
0'5	S.W.	1'0	S.W.	1'0	S.W. by S.	2'5	S.W.	2'5	S.W.	2'5	W.S.W.	3'0	W.S.W.	2'5	21
0'2	N.	0'2	W. by S.	0'5	W. by N.	1'5	W. by N.	1'0	W. by N.	1'5	W. by N.	—	W.N.W.	2'5	22
0'2	W.N.W.	0'2	W.	0'2	W.	0'2	W.	0'2	W.	0'2	N.	0'2	—	0'0	23
0'2	N.W. by N.	0'2	W.N.W.	0'2	W.N.W.	0'2	N.	0'2	N.	0'2	N.	0'2	N.N.W.	0'2	24
0'0	—	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0	S.W.	0'2	—	0'2	25
1'5	N.E.	1'0	N.E.	1'5	N.E. by E.	1'5	E.N.E.	1'5	E.N.E.	1'0	E.N.E.	0'2	E.N.E.	0'2	26
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29

FEBRUARY.

FEBRUARY.

DIRECTION AND FORCE OF THE WIND.												
Mean Gottingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	—	—	—	—	—	—	—	—	—	—	—
	2	N.E. by N.	0.2	N.E. by N.	0.2	N.E.	0.2	N.E. by E.	0.5	N.E. by E.	0.5	N.E. by E.
	3	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2	E.	0.2	E.
	4	—	0.0	—	0.0	—	0.0	S.W.	0.2	S.W.	0.2	S.S.W.
	5	W.	0.2	W.	0.2	W.	0.2	W.	0.2	W. by N.	0.2	W. by N.
	6	—	0.0	—	0.0	—	0.0	E.N.E.	1.0	E.	1.5	E. by N.
	7	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2	S.S.W.	0.2	S.S.W.
	10	N. by W.	0.2	N. by W.	0.2	N.E. by E.	0.2	E.N.E.	0.2	E.	0.2	E.
	11	—	0.0	—	0.0	—	0.0	—	0.0	E.	0.2	E.
	12	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	E.	0.2	E.
	13	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	14	—	0.0	S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	W.S.W.	0.5	W.S.W.
	15	—	—	—	—	—	—	—	—	—	—	—
	16	W.N.W.	1.0	W. by N.	0.5	W.	2.5	W.	1.5	W.	1.0	W.
	17	N.W.	0.2	N.W.	0.2	N.N.W.	0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.
	18	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by W.	0.2	S.
	19	—	0.0	N.E.	0.2	E.N.E.	0.2	E. by N.	0.2	E. by N.	0.2	E. by S.
	20	—	0.0	—	0.0	—	0.0	N.	0.2	E. by S.	0.2	E.S.E.
	21	W.N.W.	0.5	N.W. by W.	0.5	N.W. by W.	1.0	W.N.W.	1.5	W. by N.	2.5	N.W.
	22	—	—	—	—	—	—	—	—	—	—	—
	23	E. by N.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.2	E.N.E.	0.2	E. by N.
	24	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.5	E. by N.	0.5	E.N.E.
	25	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	0.5	E.N.E.	0.5	E.N.E.
	26	—	0.0	—	0.0	—	0.0	S. by E.	0.5	S.S.E.	0.5	S.S.E.
	27	S.S.E.	0.2	S.	0.5	S.	0.5	S.	0.5	S.S.W.	0.5	S.S.W.
	28	S.W. by W.	0.2	S.W. by W.	0.2	—	0.0	W.	0.2	S.W.	0.2	W.S.W.
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	0.0	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.	0.2	W.N.W.
	31	—	0.0	—	0.0	N.W. by W.	0.2	N.W.	0.2	N.N.W.	0.2	N.N.W.
(continued)												
Mean Gottingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	—	—	—	—	—	—	—	—	—	—	—
	2	E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—
	3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	4	S.W.	0.5	W.S.W.	0.5	—	0.0	—	0.0	—	0.0	—
	5	—	0.0	—	0.0	—	0.0	N.W.	0.2	N.W.	0.2	N.W.
	6	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E.
	7	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	—	0.0	—	0.0	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	—	0.0	—
	10	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	11	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	12	—	0.0	—	0.0	—	0.0	E.	0.2	E.	0.2	E.
	13	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	14	W.S.W.	0.5	W. by S.	1.0	W. by S.	1.0	W.S.W.	1.0	S.W.	0.5	S.W. by W.
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	17	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	18	E. by N.	0.2	E. by N.	0.2	E.N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E. by N.
	19	—	0.0	W. by S.	0.2	—	0.0	—	0.0	—	0.0	—
	20	—	0.0	W.N.W.	0.2	W.N.W.	0.5	W.N.W.	0.5	W.N.W.	0.2	W. by N.
	21	W.N.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.
	24	E. by N.	3.5	E. by N.	3.5	E.	4.5	E.N.E.	4.5	E.	4.5	E.
	25	—	0.0	S.W. by S.	0.2	S.S.W.	0.5	S.	0.5	S.S.W.	0.5	S.S.W.
	26	—	0.0	S.	0.2	—	0.0	—	0.0	—	0.0	—
	27	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by W.	0.2	W.S.W.
	28	W.S.W.	0.2	W.S.W.	0.5	W.S.W.	0.2	W.S.W.	0.5	W.S.W.	0.5	S.W. by W.
	29	—	—	—	—	—	—	—	—	—	—	—
	30	W.	0.2	W.	0.2	W.	0.2	—	0.0	—	0.0	—
	31	—	0.0	—	0.0	N.N.E.	0.2	—	0.0	—	0.0	—

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Gottingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
E. 0.5	N.E. by E.	0.5	N.E. by E.	0.5	E. by N.	0.5	E.S.E.	0.5	E. by S.	0.5	E. by S.	0.5	E. by S.	0.5	E. by S.	0.5	E. by S.	0.5	1		
0.2	E.	0.2	E. by S.	0.2	E.	0.2	S.E. by S.	0.5	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	2		
0.2	S.S.W.	0.5	S.W. by S.	0.5	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	3		
0.2	W. by N.	0.2	S.W.	0.2	S.S.W.	0.2	W.N.W.	0.2	S.W. by W.	0.2	W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	4		
1.5	E. by N.	1.0	E. by N.	0.5	E. by N.	0.2	E.	0.2	E.	0.2	E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	5		
0.0	—	0.0	S. by E.	0.2	S.S.E.	0.2	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	6		
0.2	S.S.W.	0.2	S.S.W.	0.2	S. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	7		
0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	8		
0.2	E.	0.2	E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	9		
0.2	E.	0.2	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	E.	0.2	E.	0.2	E.	0.2	10		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11		
0.5	W.S.W.	0.5	W.S.W.	1.5	S.W.	1.5	S.W. by S.	1.0	S.W. by S.	1.0	W.S.W.	2.0	W.S.W.	2.0	W.S.W.	2.0	W.S.W.	2.0	12		
1.0	W.	0.5	W.	0.5	N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	13		
0.5	N.N.W.	0.5	N.W.	0.5	N.W. by W.	0.5	W.N.W.	0.5	N.W.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	14		
0.2	S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.2	E.	0.2	E.	0.2	E.	0.2	15		
0.2	E. by S.	0.2	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16		
0.2	E.S.E.	0.2	S.E. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.2	—	0.2	—	0.2	—	0.2	17		
2.5	N.W.	1.5	W. by N.	1.5	W. by N.	1.5	N.N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W.	1.5	18		
0.2	E. by N.	0.2	E.	0.2	—	0.0	—	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19		
0.5	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	0.5	E. by N.	1.0	E.	1.0	E.	1.5	E. by N.	1.5	E. by N.	1.5	E. by N.	1.5	20		
0.5	E.N.E.	0.2	—	0.0	—	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21		
0.5	S.S.E.	0.5	S.E. by S.	0.5	S.E.	0.2	S.E. by E.	0.2	E. by S.	0.5	E. by S.	0.5	E. by S.	0.5	S.	0.2	S.	0.2	22		
0.5	S.S.W.	0.5	S.S.W.	0.5	S. by W.	0.2	S. by W.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.2	S.	0.2	23		
0.2	W.S.W.	0.5	S.W.	0.5	—	0.0	—	0.2	—	0.5	—	0.5	—	0.5	W. by S.	0.2	W. by S.	0.2	24		
0.2	W.N.W.	0.2	S.W.	0.2	S. by W.	0.5	S.W. by S.	0.5	S.W.	0.5	S.W.	0.5	S.W.	0.5	W.	0.2	W.	0.2	25		
0.2	N.N.W.	0.5	S.S.E.	0.5	S.S.E.	0.2	S.S.E.	0.5	S. by S.	0.5	S.S.E.	0.2	—	0.0	—	0.0	—	0.0	26		
MARCH.																					
17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			23 ^h .			Mean Gottingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1		
0.0	—	0.0	S.W. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3		
0.2	N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—	0.0	W.S.W.	0.2	W.	0.2	W.	0.2	W.	0.2	4		
0.0	N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	W. by N.	0.2	W. by N.	0.2	—	0.0	—	0.0	5		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7		
0.0	—	0.0	N.	1.0	—	0.0	N. by E.	0.5	N. by W.	1.0	N.	0.5	—	0.0	—	0.0	—	0.0	8		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9		
0.0	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	10		
0.2	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13		
0.5	S.W. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14		
0.0	—	0.0	W.N.W.	0.2	W.	1.0	W.	0.2	W. by S.	0.5	S.W. by W.	0.2	W. by S.	0.2	W. by S.	1.0	—	0.0	15		
0.0	—	0.0	N.N.W.	0.2	N.W.	0.2	—	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.5	—	0.0	16		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17		
0.2	N.E. by N.	0.2	N.E. by N.	0.2	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19		
0.2	W. by N.	2.0	N.W. by W.	0.2	W. by N.	1.0	W.	0.2	W.	1.0	W.	0.2	W.N.W.	0.2	W.N.W.	0.2	—	0.0	20		
0.0	—	0.0	N.E. by E.	0.2	N.E.	0.2	E.N.E.	0.2	E.N.E.	1.0	E.N.E.	0.5	E. by N.	0.5	E. by N.	0.5	—	0.0	21		
0.0	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.2	E.N.E.	0.2	N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	22		
4.5	E.	4.0	E.	4.0	E.	3.5	E.	1.0	E.	3.0	E.	2.5	E.	2.5	E.	2.0	—	0.0	23		
0.5	S.S.W.	0.5	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25		
0.2	W.S.W.	0.2	W.S.W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26		
0.5	S.W. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27		
0.0	—	0.0	W. by S.	0.2	W. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	31		
MARCH.																					

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Dir.	Force.	Direction.	Force.
APRIL.	1	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—
	2	N.N.E.	0'0	—	0'0	—	S.E.	0'2	E.S.E.	0'5	S.E.	0'5
	3	N.N.E.	0'2	N.E.	0'2	E. by N.	0'2	E.	1'0	E. by N.	1'0	E. by S.
	4	N.N.E.	0'2	N.E. by E.	0'2	E. by S.	0'5	E.	0'5	E.	0'2	E.
	5	—	0'0	E.	0'2	E.	0'2	E.	0'5	E.	0'5	E.
	6	N. by W.	0'5	N. by W.	0'2	N. by E.	0'2	N.	0'2	E.	0'2	E.
	7	—	0'0	—	0'0	—	—	—	0'0	—	0'0	—
	8	W. by S.	2'5	W. by S.	3'0	W.	3'0	W.S.W.	3'0	W. by S.	2'5	W.S.W.
	9	—	0'0	—	0'0	—	S.W.	0'2	S. by W.	0'2	S.	0'5
	10	—	—	—	—	—	—	—	—	—	—	—
	11	—	0'0	—	0'0	—	S.W. by S.	0'5	S.W. by S.	1'0	W.S.W.	2'5
	12	—	—	—	—	—	—	—	—	—	—	—
	13	N. by E.	0'2	N.	0'2	N. by W.	0'2	N.N.W.	0'5	N.W. by N.	1'5	N. by W.
	14	—	0'0	S.W. by W.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	1'0	S.S.W.
	15	N.N.W.	2'5	N.N.W.	2'5	N.N.W.	3'0	N.N.W.	2'5	N. by W.	2'0	W.N.W.
	16	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	E.S.E.
	17	—	0'0	—	0'0	—	0'0	E. by S.	0'2	E.S.E.	0'2	E.S.E.
	18	N.W.	0'5	W.N.W.	0'5	W.S.W.	0'5	S.S.E.	0'2	S.W. by S.	0'5	S.S.W.
	19	—	—	—	—	—	—	—	—	—	—	—
	20	—	0'0	—	0'0	S.W. by S.	0'2	S.	0'5	S.	0'2	S.
	21	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.S.W.
	22	E.	0'2	E. by N.	0'2	E.N.E.	0'2	E.	0'2	E.	0'2	E.
	23	N.N.E.	0'2	—	0'0	N.E. by N.	0'2	E.S.E.	0'2	E.	0'2	E.N.E.
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	25	E.	0'5	E.S.E.	0'5	E.	0'5	E.	0'5	E.	0'2	E.
	26	—	—	—	—	—	—	—	—	—	—	—
	27	—	0'0	—	0'0	N. by E.	0'2	S.E. by S.	0'2	S. by W.	0'2	S. by E.
	28	N.E. by N.	0'2	E.N.E.	0'5	E.	1'0	E.N.E.	1'0	E.N.E.	1'5	E. by N.
	29	E. by N.	2'0	E.N.E.	1'0	E.N.E.	1'0	E.N.E.	1'0	N.E. by E.	1'0	N.E. by E.
	30	E.N.E.	0'2	E.N.E.	0'2	E. by S.	0'2	E. by S.	0'2	E.N.E.	0'2	E. by N.
(continued)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
APRIL.	1	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	1'5	E. by N.	0'5	E.N.E.	0'2	E. by N.
	5	—	—	—	—	—	—	—	—	—	—	—
	6	E.N.E.	0'2	E.N.E.	0'2	E. by N.	0'5	E. by N.	0'5	E. by N.	1'0	E.N.E.
	7	S.W.	0'5	S.S.W.	1'5	S.S.W.	2'0	S.W.	2'0	W.	1'0	W. by S.
	8	W.	1'5	W. by N.	0'2	—	0'0	—	0'0	—	0'0	—
	9	E.	0'2	—	0'0	N.E.	0'2	N.E.	0'2	N.E.	0'2	—
	10	—	—	—	—	—	—	—	—	—	—	—
	11	W.	2'5	W.	1'5	W.	1'0	W.N.W.	0'5	N.W. by N.	0'5	N.W. by N.
	12	—	—	—	—	—	—	—	—	—	—	—
	13	N.W. by W.	2'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	14	W.S.W.	2'0	W.S.W.	1'0	W.S.W.	0'5	S.W.	0'5	S.W.	0'2	N.W.
	15	S. by E.	0'2	S.S.E.	0'2	E. by N.	0'2	—	0'0	—	0'0	—
	16	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	17	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	18	N.W.	2'5	N.W.	3'5	S.W.	1'0	W.	0'2	S.W. by S.	0'2	—
	19	—	—	—	—	—	—	—	—	—	—	—
	20	S.W.	0'5	S.W.	0'2	—	0'0	S.W.	0'2	—	0'0	—
	21	N.N.W.	2'0	N.N.W.	1'0	N. by W.	0'5	E.N.E.	0'2	E. by S.	0'2	N.E.
	22	—	0'0	—	0'0	S.W.	0'2	—	0'0	—	0'0	—
	23	E.N.E.	0'2	—	0'0	—	0'0	E.	0'2	E. by N.	0'2	E.N.E.
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	25	E.N.E.	0'2	—	0'0	—	0'0	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.
	26	—	—	—	—	—	—	—	—	—	—	—
	27	S.S.W.	0'2	—	0'0	—	0'0	N.W. by N.	0'2	N. by W.	0'2	N. by W.
	28	E.	3'0	E.	2'5	E.	2'0	E.	2'0	E.	1'0	E.
	29	E. by N.	0'2	E. by N.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—
	30	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—

DIRECTION AND FORCE OF THE WIND.

5 ^h .				6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	lbs.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.			lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.5	S.E.	0.5	0.5	S. by E.	0.5	S.S.W.	0.5	S. by W.	0.2	S. by W.	0.2	S. by E.	0.2	—	0.0	1
1.0	E. by S.	0.5	0.5	E. by S.	0.5	E.	1.0	E.	0.5	E. by S.	0.5	E.	0.5	E.	0.2	2
0.2	E.	0.2	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.0	3
0.5	E.	0.5	0.5	E.	0.5	E.	0.5	E.	0.2	N.E. by E.	0.2	E. by N.	0.2	E.N.E.	0.2	4
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
0.2	E.	0.2	0.2	E. by S.	0.5	E. by N.	0.5	E.	0.5	E.	0.5	E. by N.	0.5	E. by N.	0.2	6
0.0	—	0.0	0.0	S. by E.	0.2	S.W.	0.5	S.W. by S.	0.2	S.S.W.	0.5	S.W.	1.5	S.W.	1.5	7
2.5	W.S.W.	2.5	2.5	W.S.W.	3.0	W.S.W.	3.0	W.	3.5	W.	3.0	W.	2.5	W.	2.5	8
0.5	S.	0.5	0.5	S. by E.	0.5	S.E.	0.5	S.E. by S.	0.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	9
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
1.0	W.S.W.	2.5	2.5	W. by S.	4.0	W.	5.5	W.	5.5	W.	5.5	W. by S.	4.0	W.	3.0	11
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12
1.5	N. by W.	0.5	0.5	N.W.	2.0	N.N.W.	2.5	N.N.W.	3.0	N.W.	3.0	N.W.	3.0	N.N.W.	2.5	13
1.0	S.S.W.	2.0	2.0	S.S.W.	1.0	S.S.W.	1.0	S.W. by W.	0.5	W.S.W.	2.0	W.S.W.	1.5	W.S.W.	2.0	14
2.0	N.N.W.	1.5	1.5	N.N.W.	1.0	N.N.W.	1.0	W.	1.0	W. by S.	1.0	S. by W.	0.5	S. by W.	0.2	15
0.2	E.S.E.	0.5	0.5	E. by S.	0.5	E.S.E.	0.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	E.	0.5	16
0.2	E.S.E.	0.2	0.2	E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	17
0.5	S.S.W.	0.5	0.5	S.W. by S.	0.5	S.S.W.	1.0	S.S.W.	1.5	S. by W.	1.0	S. by W.	0.2	—	0.0	18
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
0.2	S.	0.2	0.2	S. by E.	0.2	S.	0.2	S.	0.2	S.W. by S.	0.5	S.W.	1.0	S.W.	1.0	20
0.2	S.S.W.	0.2	0.2	S.W. by S.	1.0	S.W. by S.	0.5	W.	2.0	N. by W.	3.0	N.N.W.	2.5	N.N.W.	3.0	21
0.2	E.	0.2	0.2	E.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.0	22
0.2	E.N.E.	1.0	1.0	N.E. by E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	0.2	E.N.E.	0.2	23
0.0	—	0.0	0.0	E. by S.	0.2	E.	0.2	E.	0.2	E.	0.2	E.N.E.	0.2	E.N.E.	0.2	24
0.2	E.	0.2	0.2	—	—	—	—	—	—	—	—	—	—	—	—	25
0.2	S. by E.	0.2	0.2	S.S.E.	0.2	S.	0.2	S.S.E.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	26
1.5	E. by N.	2.5	2.5	E.N.E.	2.5	N.E. by E.	2.5	E.N.E.	2.0	E. by N.	2.0	E.	2.5	E.N.E.	3.5	27
1.0	N.E. by E.	1.0	1.0	N.E. by E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	N.E. by E.	1.0	E.N.E.	0.5	28
0.2	E. by N.	0.2	0.2	E. by S.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	E.	0.2	E.	0.2	29

17.				18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	lbs.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.			lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	1
0.0	—	0.0	0.0	—	0.0	N.N.E.	0.2	N.N.E.	0.2	N.E. by N.	0.2	—	0.0	—	0.0	2
0.2	E. by N.	0.2	0.2	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	—	0.0	—	0.0	3
0.2	—	0.2	0.2	—	0.0	—	0.0	—	0.0	—	—	—	—	—	—	4
—	—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	N.	0.5	5
1.0	E.N.E.	1.0	1.0	E.N.E.	1.0	E.N.E.	0.5	N.E.	0.2	—	0.0	—	0.0	—	0.0	6
1.0	W. by S.	1.5	1.5	W.S.W.	2.5	W.S.W.	2.5	W.S.W.	2.5	W.S.W.	3.0	W. by S.	1.5	W. by S.	3.0	7
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.2	—	0.2	0.2	E. by N.	0.2	E.	0.5	E.	0.5	E. by S.	0.2	E.S.E.	0.2	—	0.0	9
0.5	N.W. by N.	0.5	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
0.2	N.W.	0.2	0.2	N.W.	0.2	N.W.	2.5	N.W. by W.	3.5	N.W.	2.5	N.N.W.	0.2	N.W.	0.2	12
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
0.2	—	0.2	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.W.	2.0	16
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
0.0	—	0.0	0.0	N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—	0.0	18
0.2	—	0.2	0.2	E.S.E.	0.2	E.	0.2	E.	0.2	W. by S.	0.2	W.S.W.	0.2	—	0.0	19
0.0	—	0.0	0.0	—	0.0	—	0.0	—	0.0	E.	0.2	E.	0.2	E.	0.2	20
0.2	N.E.	0.2	0.2	—	0.0	—	0.0	—	0.0	—	0.0	N. by E.	0.2	—	0.0	21
0.0	—	0.0	0.0	E.N.E.	0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	22
0.2	E.N.E.	0.2	0.2	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	E.	1.0	E.	1.0	23
0.0	—	0.0	0.0	—	—	—	—	—	—	—	—	—	—	—	—	24
0.2	E.N.E.	0.2	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	25
—	—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26
0.2	N. by W.	0.2	0.2	E.	0.2	N.E. by E.	0.2	E.	0.5	N.E.	1.0	N.E.	2.5	E. by N.	3.0	27
1.0	E.	0.2	0.2	—	0.0	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	28
0.2	—	0.2	0.2	E.N.E.	0.2	E.N.E.	0.2	N.E.	0.2	N.E.	0.5	N.E.	0.2	N.E. by E.	0.2	29
0.0	—	0.0	0.0	—	—	—	—	—	—	—	—	—	—	—	—	30

APRIL

APRIL

DIRECTION AND FORCE OF THE WIND.													
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
E. by N.	1'0	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'2	—	0'0	—	0'0	1	
S. by W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.	0'2	2	
—	—	—	—	—	—	—	—	—	—	—	—	3	
S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S.S.E.	0'2	4	
W.	0'2	W. by S.	0'5	S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	5	
E.	0'5	E.	0'5	E.	0'2	E.	0'2	E.	0'2	E. by N.	0'2	6	
E.	0'2	E.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'2	—	0'0	7	
E.N.E.	1'0	E. by N.	1'5	E.	2'5	E.	1'5	E. by N.	1'5	E.N.E.	1'0	8	
E.N.E.	2'5	E.N.E.	3'5	E.N.E.	3'5	E.N.E.	3'5	E.N.E.	3'5	E.N.E.	4'0	9	
—	—	—	—	—	—	—	—	—	—	—	—	10	
N.W.	2'0	N.W.	2'5	N.N.W.	2'0	N.W.	2'5	N.N.W.	2'5	N.N.W.	2'0	11	
S.	0'5	S.	0'5	S.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'0	12	
S.S.W.	2'0	S.W.	2'5	S.W.	3'0	S.W.	3'0	S.W.	3'0	S.W.	3'5	13	
S.E. by E.	0'2	S.E.	0'2	S. by W.	1'5	S.W. by S.	2'5	S.W. by S.	1'5	S.S.W.	1'0	14	
N.W.	0'2	S.W. by S.	0'5	S.W. by S.	0'5	S.S.W.	0'2	S.S.E.	0'2	N. by E.	0'2	15	
S.S.E.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	16	
—	—	—	—	—	—	—	—	—	—	—	—	17	
N.N.W.	4'0	N.N.W.	5'0	N.N.W.	3'5	N.W.	3'0	N.W.	2'5	N.N.W.	2'5	18	
S. by W.	0'5	S. by W.	0'5	S. by W.	0'5	S.S.E.	0'5	S.S.E.	0'2	S. by W.	1'0	19	
W. by N.	3'5	N.W. by W.	3'5	W.N.W.	3'5	N.W.	4'0	N.W.	4'0	N.N.W.	3'5	20	
S. by E.	0'5	S.E.	0'5	S.E. by S.	0'5	S.E. by S.	0'5	E.S.E.	0'2	E. by S.	0'2	21	
E.	0'5	E.	0'5	E.	0'2	E. by S.	0'2	E.	0'2	E. by N.	0'2	22	
W.S.W.	0'2	W.	1'5	W.N.W.	1'0	W.N.W.	2'0	W.N.W.	1'5	N.W. by W.	0'5	23	
—	—	—	—	—	—	—	—	—	—	—	—	24	
S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0	25	
S.E.	0'2	S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	26	
W.	1'0	W.N.W.	1'0	W.N.W.	1'0	N.W. by W.	1'0	N.W.	0'5	W. by N.	0'2	27	
S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	S.E. by S.	0'2	—	0'0	28	
S.E.	0'2	S.E.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	29	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	30	
—	—	—	—	—	—	—	—	—	—	—	—	31	

DIRECTION AND FORCE OF THE WIND.													
18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1	
—	—	—	—	—	—	—	—	—	—	—	—	2	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4	
—	0'0	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	5	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7	
N.N.E.	0'2	N. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	8	
N.E. by E.	0'2	N.E. by E.	0'5	E.N.E.	1'5	N.E.	0'5	N.E.	0'2	E.N.E.	0'5	9	
N. by W.	1'0	N.N.W.	1'5	N. by W.	1'5	N.N.W.	0'5	N.N.W.	0'5	N.N.W.	1'5	10	
—	0'0	—	0'0	W.	0'2	W. by N.	0'2	W. by N.	0'2	N.N.W.	0'2	11	
—	0'0	—	0'0	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	12	
S.W.	0'5	S.W. by W.	0'5	S.W. by S.	0'5	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	13	
W.S.W.	1'5	—	0'0	—	0'0	—	0'0	N.	2'0	N.	1'5	14	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15	
N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'5	16	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17	
—	0'0	—	0'0	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	18	
—	0'0	N.N.E.	0'2	—	0'0	—	0'0	—	0'0	E. by N.	0'2	19	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20	
—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	N. by W.	1'2	N.N.E.	0'2	21	
—	—	—	—	—	—	—	—	—	—	—	—	22	
—	0'0	—	0'0	N.W.	0'2	N.W.	0'2	W.	0'2	—	0'0	23	
—	0'0	—	0'0	S.W.	0'2	—	0'0	—	0'0	—	0'0	24	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28	
—	0'0	E. by N.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	29	
—	—	—	—	—	—	—	—	—	—	—	—	30	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	31	

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	lbs. 0.0	E.	lbs. 0.2	E.	lbs. 0.2	E by N.	0.2	E.N.E.	0.5	E. by N.	0.5
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	3	—	0.0	—	0.0	S.S.W.	0.2	S.W.	0.2	S.W. by S.	0.2	S.S.W.	0.2
	4	—	0.0	E. by S.	0.2	E. by S.	0.2	—	0.0	—	0.0	—	0.0
	5	N. by W.	0.2	N. by W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	N.N.W.	0.2
	6	N.W.	0.5	N.W.	0.5	N.W.	1.0	N.W.	1.5	N.W. by N.	0.5	N.W. by W.	1.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	—	0.0	—	0.0	E.	0.2	E. by S.	0.2
	9	—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	S.E.	0.2
	10	N.N.E.	0.2	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	11	N. by W.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	E. by N.	0.5	E.	0.5	E. by S.	0.2
	12	N.E.	0.2	N.E.	0.5	E.N.E.	1.0	E.	1.0	E.	0.5	E.	0.5
	13	E.N.E.	0.2	E. by N.	0.5	E.N.E.	0.5	E.	0.2	E.	0.5	E.	0.2
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	0.0	—	0.0	—	0.0	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	16	N. by E.	0.2	N. by E.	0.2	E.N.E.	0.2	E.S.E.	0.2	E.S.E.	0.5	S.E. by E.	0.5
	17	—	0.0	—	0.0	—	0.0	S.E. by S.	0.2	S. by E.	0.2	S. by E.	0.2
	18	—	0.0	—	0.0	—	0.0	—	0.0	S.S.E.	0.2	S.S.E.	0.2
	19	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	W.S.W.	0.5
	20	N.W. by N.	0.5	N.N.W.	0.5	N.N.W.	0.2	N.N.W.	1.0	N. by W.	1.5	N. by W.	1.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	N.W.	1.0	N.W.	1.0	N.W. by N.	1.0	N.W. by N.	1.5	N. by W.	2.5	N.	2.5
	23	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N. by W.	0.5	N.	0.5	N.N.W.	1.0
	24	N.N.W.	0.2	—	0.0	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	25	—	0.0	—	0.0	N.N.W.	0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5
	26	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	27	—	0.0	W.N.W.	0.2	E.S.E.	0.2	E. by S.	0.2	E.	0.2	E.	0.2
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.5	E.	0.5
	30	—	0.0	E.N.E.	0.2	E. by N.	0.2	E.	0.5	E. by S.	0.5	E.	0.5
	(continued)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	E. by S.	0.2	E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	2	S. by W.	1.5	S.W.	1.0	W. by N.	1.5	W. by N.	0.2	—	0.0	—	0.0
	3	S.W.	0.2	S.	0.2	—	0.0	S.W. by S.	0.2	—	0.0	—	0.0
	4	N. by E.	0.2	—	0.0	S.E. by E.	0.2	—	0.0	—	0.0	—	0.0
	5	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	N.W. by N.	0.2	N.W.	0.5
	6	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2	—	0.0
	9	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	10	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	11	—	0.0	—	0.0	—	0.0	E.	0.2	E. by N.	0.2	N.E.	0.2
	12	E.	0.5	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	13	N.E. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.5	N. by W.	0.5
	16	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	17	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	18	W.N.W.	0.2	—	0.0	—	0.0	N.N.E.	0.2	W.N.W.	2.5	N.W. by N.	0.2
	19	N.W. by N.	0.5	N. by W.	1.0	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0
	20	N.N.W.	2.0	N.N.W.	1.0	N.N.W.	1.0	N.W. by N.	1.5	N.W. by N.	1.5	N.W. by N.	1.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E. by N.	0.2
	23	N.W. by N.	0.5	N.W.	0.2	N.W. by N.	0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5
	24	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	0.5	—	0.0	—	0.0	—	0.0
	25	—	0.0	N.W.	0.2	N.W.	0.2	—	0.0	—	0.0	—	0.0
	26	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	27	—	0.0	E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0.2	E. by N.	0.2	—	0.0	—	0.0	—	0.0	E. by N.	0.2
	30	E.N.E.	0.2	E.N.E.	0.2	—	0.0	—	0.0	E. by N.	0.2	E.N.E.	0.2

5 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0.5	E. by N.	0.5
0.0	—	0.0
0.2	S.S.W.	0.2
0.0	—	0.0
0.0	N.N.W.	0.2
0.5	N.W. by W.	1.0
—	—	—
0.2	E. by S.	0.2
0.2	S.E.	0.2
0.2	S.S.W.	0.2
0.5	E. by S.	0.2
0.5	E.	0.5
0.5	E.	0.2
—	—	—
0.2	S.S.W.	0.2
0.5	S.E. by E.	0.5
0.2	S. by E.	0.2
0.2	S.S.E.	0.2
0.0	W.S.W.	0.5
1.5	N. by W.	1.5
—	—	—
2.5	N.	2.5
0.5	N.N.W.	1.0
0.2	N.N.W.	0.2
0.5	N.N.W.	0.5
0.0	—	0.0
0.2	E.	0.2
—	—	—
0.5	E.	0.5
0.5	E.	0.5

17 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.2	N.W.	0.5
0.0	—	0.0
—	—	—
0.2	—	0.0
0.0	—	0.0
0.0	—	0.0
0.2	N.E.	0.2
0.0	—	0.0
0.0	—	0.0
—	—	—
0.5	N. by W.	0.5
0.0	—	0.0
0.0	—	0.0
2.5	N.W. by N.	0.2
0.2	—	0.0
1.5	N.W. by N.	1.5
—	—	—
0.0	E. by N.	0.2
0.5	N.N.W.	0.5
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	E. by N.	0.2
0.2	E.N.E.	0.2

DIRECTION AND FORCE OF THE WIND.													
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		JUNE.	
E. by N.	1.0	E.	1.5	E.	1.0	E.	1.0	E.	0.5	E. by S.	0.2		
S. by W.	0.5	S.S.E.	0.5	S.S.W.	1.0	S. by W.	1.0	S.S.W.	0.5	S. by W.	1.0	1	
S.W.	1.5	S.W. by W.	1.5	S.W. by W.	2.5	S.S.W.	3.0	S. by W.	0.2	S.	—	2	
E. by N.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	1.0	E.	1.0	S.S.W.	0.2	3	
N. by W.	0.2	N.	0.2	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	4	
W. by N.	0.5	N.W. by N.	1.0	N.W. by N.	1.0	N.W. by N.	0.5	N.W. by N.	0.5	N.W. by N.	0.5	5	
—	—	—	—	—	—	—	—	—	—	—	—	6	
S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	7	
S.E.	0.2	S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	8	
S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S. by W.	0.2	S.	0.2	S.	0.2	9	
—	0.0	—	0.0	E. by N.	0.2	E. by S.	0.2	E.S.E.	0.2	—	0.0	10	
E.	1.0	E.	1.0	E.	0.5	E.	0.5	E. by N.	0.2	E.	0.5	11	
E.	0.2	E.	0.5	E.	0.5	E.N.E.	0.5	E. by N.	0.2	E.N.E.	0.2	12	
—	—	—	—	—	—	—	—	—	—	—	—	13	
S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	N.N.W.	0.2	14	
S.E. by S.	0.5	S.S.E.	0.2	S.S.E.	0.2	S.E.	0.2	S.E.	0.2	—	0.0	15	
S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	—	0.0	16	
S.S.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	17	
W. by S.	1.0	W. by S.	1.0	W.	1.5	W.N.W.	1.5	N.W.	1.5	W. by N.	1.0	18	
N.W. by N.	2.5	N.N.W.	2.5	N.N.W.	1.5	N.W. by N.	1.5	N.N.W.	2.5	N.N.W.	2.0	19	
—	—	—	—	—	—	—	—	—	—	—	—	20	
N. by E.	2.5	N.	2.5	N.	2.0	N. by W.	2.0	N.N.E.	1.0	N.N.E.	0.2	21	
N. by W.	2.5	N. by W.	2.0	N.N.W.	1.0	N.W.	1.0	N.W.	1.0	N.W.	1.0	22	
N.W.	0.2	N. by W.	0.2	N. by W.	0.5	W.N.W.	1.5	N.W. by N.	0.5	N.N.W.	1.0	23	
N.N.W.	0.5	N.W.	0.5	S. by W.	0.2	S. by W.	0.2	—	0.0	—	0.0	24	
N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	W.	0.2	S.W.	0.2	—	0.0	25	
E.	0.2	—	0.0	E.	0.2	E.N.E.	0.2	—	0.0	E.N.E.	0.2	26	
—	—	—	—	—	—	—	—	—	—	—	—	27	
E.	0.5	E.	0.5	E.	1.0	E. by N.	0.5	E.S.E.	0.2	E. by S.	0.2	28	
E.	1.0	E.	1.5	E. by N.	1.5	E. by S.	1.5	E. by N.	1.0	E.N.E.	0.5	29	
—	—	—	—	—	—	—	—	—	—	—	—	30	

DIRECTION AND FORCE OF THE WIND.													
18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		JUNE.	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0		
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3	
0.2	N.W.	0.5	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	4
0.0	—	0.0	W.N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.5	W.N.W.	0.2	5
—	—	—	—	—	—	—	—	—	—	—	—	6	
N.N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	—	0.0	7	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10	
N.E.	0.5	N.E.	0.5	N.E. by N.	0.2	N.E.	0.5	N.N.W.	0.2	N.N.W.	0.2	11	
E.N.E.	0.2	E. by N.	0.2	E. by N.	0.5	E. by N.	1.0	—	0.0	—	0.0	12	
—	—	—	—	—	—	—	—	—	—	—	—	13	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14	
N. by W.	0.5	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	15	
—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	16	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17	
N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18	
N.N.W.	0.2	—	0.0	—	0.0	N.W.	0.5	N.N.W.	1.0	N.W. by N.	0.5	19	
—	—	—	—	—	—	—	—	—	—	—	—	20	
N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.W.	1.0	N.N.W.	1.0	N.N.W.	1.5	21	
—	0.0	N.E. by N.	0.2	N. by N.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.5	22	
N.W. by N.	0.5	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	23	
—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	N.W. by N.	0.2	N.W. by N.	0.2	24	
N.W.	0.2	—	0.0	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	25	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26	
—	—	—	—	—	—	—	—	—	—	—	—	27	
N.E.	0.2	N.E.	0.2	—	0.0	—	0.0	N.E.	0.2	—	0.0	28	
—	0.0	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	29	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30	

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	lbs.
JULY.	1	—	0'0	N.E. by E.	0'5	E.N.E.	0'2	E. by N.	0'5	E.S.E.	0'5	E.	0'2
	2	N. by W.	1'0	N.	1'0	N.	2'5	N. by W.	1'5	N. by E.	1'0	N.E. by N.	0'5
	3	—	0'0	E. by S.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'5
	4	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	E.S.E.	0'2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W.N.W.	0'2	N.W.	0'2	N.N.W.	1'0	W.N.W.	1'0	S.S.W.	0'5	S. by W.	0'5
	7	—	0'0	—	0'0	N.	0'5	N. by W.	0'2	N.	0'2	N.N.W.	0'5
	8	W.	0'2	W.	0'2	N.W.	0'5	W.	0'2	S.W. by W.	0'2	S.W. by S.	0'5
	9	—	0'0	—	0'0	W.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0
	10	—	0'0	W.S.W.	0'2	W.S.W.	0'2	S.S.W.	0'2	W. by S.	0'2	W.	0'5
	11	W.S.W.	0'2	S.W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	W.S.W.	1'5	S.S.W.	1'5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N.W.	0'5	N.W.	0'5	N.W. by W.	0'2	W. by N.	1'0	N.W.	1'5	N.W.	1'5
	14	—	0'0	N.N.W.	0'2	N. by W.	0'2	N.W.	0'5	N.W.	0'5	N.W.	0'5
	15	N.W. by W.	0'2	N.W.	0'2	N.W. by N.	0'5	N. by W.	1'5	N.N.W.	2'0	N.W. by N.	1'5
	16	—	0'0	—	0'0	N.N.W.	0'2	N.	0'2	N.N.E.	0'2	S.S.E.	0'2
	17	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.E. by S.	0'2
	18	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.	0'2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	—	0'0	S.E. by S.	0'2
	21	E. by N.	0'2	—	0'0	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2
	22	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	S.E.	0'2
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	—	0'0	—	0'0	E. by S.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.	0'0
	25	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	W.	0'2	N.N.W.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	E.N.E.	0'2	N.E. by E.	0'2	E. by S.	0'5	E.	0'2	E.	0'5	E. by S.	0'5
	28	N.E.	0'2	N.E.	0'2	E. by N.	0'2	E. by N.	0'2	E.S.E.	0'5	E.S.E.	0'2
	29	—	0'0	—	0'0	—	0'0	S. by W.	0'5	S.	0'5	S.S.W.	0'5
	30	—	0'0	S.S.W.	0'2	S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by S.	0'5
	31	—	0'0	—	0'0	N.N.W.	0'2	N. by W.	0'5	N.N.W.	0'2	N.N.W.	0'5
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JULY.	1	—	lbs.	—	—	lbs.	—	—	lbs.	—	—	—	
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	E.	0'2	E.	0'2	E.	0'2	—	0'0	—	0'0	—	
	5	—	—	—	—	—	—	—	—	—	—	—	
	6	N.W. by W.	1'0	N.N.W.	0'5	N.N.W.	0'2	—	0'0	N.N.W.	0'2	N.N.W.	0'2
	7	N.N.W.	1'0	N.N.W.	0'5	—	0'0	—	0'0	—	0'0	—	0'0
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	10	N.W. by W.	5'5	N.W.	2'5	S.W.	0'5	S.W.	0'5	W.S.W.	0'5	—	0'0
	11	S.S.W.	0'2	S.W.	0'2	W. by N.	0'5	W.	0'5	W.N.W.	0'5	W.N.W.	0'2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	S.W.	0'2	N.W. by N.	1'0	N.W. by W.	0'2	—	0'0	N.W.	0'2	—	0'0
	14	N.W.	1'5	N.W.	1'0	—	0'0	—	0'0	—	0'0	N.W. by W.	0'5
	15	N.N.W.	0'5	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	0'0	—	0'0	—	0'0	N.W. by N.	0'2	N.W. by N.	0'2	—	0'0
	17	E.	0'2	E.	0'2	—	0'0	—	0'0	N.E. by N.	0'2	N.E. by N.	0'2
	18	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	E.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	21	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	24	N.N.W.	0'2	N.N.W.	0'2	N.W.	0'5	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'2
	25	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	—	0'0	—	0'0
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	S.W. by S.	0'5	S.W. by S.	0'2	—	0'0	—	0'0	—	0'0	S. by W.	0'5
	30	W.N.W.	1'0	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.W.	1'0	N.W.	0'2
	31	N.N.W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	N. by W.	0'2

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Gottingen Time.
Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.			
lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.			
0.5	E.	0.2	E. by S.	0.2	E.S.E.	0.5	E. by S.	0.5	E. by S.	0.2	S.E. by E.	0.2	E.N.E.	0.2	1						
1.0	N.E. by N.	0.5	S.S.E.	0.5	S.S.E.	0.5	S. by E.	0.5	S.	0.2	S.	0.2	S.	0.2	2						
0.2	E.S.E.	0.5	E.S.E.	0.2	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.2	E.S.E.	0.2	—	0.0	3						
0.2	E.S.E.	0.2	—	—	—	0.0	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.	0.2	4						
0.5	S. by W.	0.5	S. by W.	0.5	N.W. by W.	1.0	N.N.W.	1.0	N.N.W.	1.0	W.N.W.	1.5	W.N.W.	1.0	5						
0.2	N.N.W.	0.5	S.S.E.	0.2	S.	1.0	S. by W.	1.0	N.N.W.	1.0	N.W. by N.	1.5	N.W.	1.0	6						
0.2	S.W. by S.	0.5	S.W. by S.	0.2	S.S.W.	0.2	S.S.W.	0.5	S. by W.	0.2	S. by W.	0.2	—	0.0	7						
0.2	N.N.W.	0.0	N.N.W.	0.2	S.S.W.	1.5	N.W.	0.5	—	0.0	S.W. by S.	0.2	—	0.0	8						
0.2	W.	0.5	S.W.	1.5	N.W. by W.	0.5	S. by E.	0.2	—	0.0	—	0.0	W. by S.	4.0	9						
1.5	S.S.W.	1.5	W. by S.	2.5	W. by S.	3.0	W.S.W.	2.5	S.W. by S.	1.0	S.W. by S.	0.5	S.S.W.	0.2	10						
1.5	N.W.	1.5	W.N.W.	1.5	W. by N.	1.5	W.N.W.	1.5	W. by N.	1.5	W. by S.	0.5	S.W.	0.2	11						
0.5	N.W.	0.5	N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.W.	0.5	N.W.	1.0	N.N.W.	1.5	12						
2.0	N.W. by N.	1.5	N.W. by N.	1.5	N.N.W.	2.0	N.N.W.	1.5	N. by E.	1.5	N.W.	1.0	N.W. by N.	0.5	13						
0.2	S.S.E.	0.2	S.S.W.	0.2	S.S.W.	0.2	S. by W.	0.2	S.S.W.	0.2	—	0.0	—	0.0	14						
0.2	S.E. by S.	0.2	E.S.E.	0.2	S.E.	0.2	S.E.	0.2	S.E.	0.2	E. by S.	0.2	E.	0.2	15						
0.2	S.	0.2	S. by W.	0.2	S.S.E.	0.2	S.E.	0.2	E.	0.2	E. by S.	0.2	S.E.	0.2	16						
0.0	S.E. by S.	0.2	S.E. by S.	0.5	S.E.	0.5	S.E.	0.5	S.E. by S.	0.2	S.E. by S.	0.2	E.S.E.	0.2	17						
0.2	S.E.	0.2	S.E. by E.	0.2	E. by S.	0.2	E.	0.2	E.	0.2	E.	0.2	E. by N.	0.5	18						
0.2	S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	S.E.	0.2	S.E.	0.2	—	0.0	—	0.0	19						
0.0	E.	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S. by E.	0.2	S.S.E.	0.2	20						
0.2	N.N.W.	0.2	N.E.	0.5	N. by W.	1.5	N.	1.5	N.N.W.	1.5	N.W. by N.	1.0	N.N.W.	1.5	21						
0.5	E. by S.	0.5	N.W. by N.	0.2	N.N.W.	0.5	W.N.W.	0.5	W.N.W.	0.2	S.S.W.	0.2	—	0.0	22						
0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.2	E.	0.2	E.	0.2	23						
0.5	S.S.W.	0.5	E.S.E.	0.5	S.E.	0.5	E.S.E.	0.5	S.E. by S.	0.2	E.S.E.	0.2	E.S.E.	0.2	24						
0.5	S.W. by S.	1.0	S. by W.	1.0	S. by W.	1.0	S. by W.	1.0	S. by W.	2.0	S.S.W.	1.0	S.W. by S.	0.5	25						
0.2	S.W. by S.	0.5	S.W. by S.	0.5	S.W.	1.5	W.S.W.	2.0	W.S.W.	2.5	W. by S.	1.5	W.	1.0	26						
0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.2	N. by E.	0.5	N. by W.	0.2	N.N.W.	0.2	27						
17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			23 ^h .			Mean Gottingen Time.
Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.			
lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.		lbs.	lbs.			
0.0	—	0.0	—	0.0	N. by E.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	1		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2		
0.0	—	0.0	—	0.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	3		
0.0	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	4		
0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	7		
0.0	S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8		
0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9		
0.5	W.N.W.	0.2	—	0.0	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.W.	0.2	10		
0.2	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	N.W.	0.5	N.W.	0.5	11		
0.0	N.W. by W.	0.5	N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	N.W. by N.	0.2	13		
0.2	—	0.0	—	0.0	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	14		
0.2	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	15		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E. by N.	0.2	19		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	21		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22		
0.2	N.W. by N.	0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	23		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	N.N.W.	0.2	24		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25		
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26		
0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	27		
0.0	S. by W.	0.5	S. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28		
1.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.5	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	29		
0.0	N. by W.	0.2	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	30		

JULY.

JULY.

JULY.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
AUGUST.	1	N. by W.	lbs. 0.2	N. by W.	lbs. 0.2	N. by E.	0.2	N. by E.	lbs. 0.5	N. by W.	lbs. 0.2	N.N.W.	lbs. 0.5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	S.E. by S.	0.2	—	0.0
	4	—	0.0	S.S.W.	0.2	S.W.	0.2	S.W. by S.	0.5	S. by W.	0.5	N.W. by S.	0.5
	5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.2
	6	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	N.E.	0.2	S.S.E.	0.2
	7	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.5	N. by W.	1.0	N.	1.5	N.N.W.	0.5
	11	—	0.0	—	0.0	N.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2
	12	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.5
	13	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	S.W.	0.2	S.W.	0.2
	14	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	S. by W.	0.2
	15	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	S.W. by S.	0.2	S. by W.	0.2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0.0	N. by W.	0.2	N.	0.5	N.	0.5	N.	0.5	N.	0.5
	18	—	0.0	—	0.0	N.E.	0.2	E.N.E.	0.2	S.E.	0.2	S.E. by E.	0.2
	19	N.E.	0.2	E.S.E.	0.2	E.S.E.	0.5	E. by S.	0.5	E. by S.	1.0	E.N.E.	1.0
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	21	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	S.E.	0.2
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0.0	—	0.0	N.E.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2
	25	N.N.E.	0.2	N.N.E.	0.2	N.E. by E.	0.2	E. by S.	0.2	E.	0.2	S.E. by E.	0.2
	26	—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	E.S.E.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by S.	0.2	S.E. by S.	0.2
	28	—	0.0	—	0.0	N.E. by N.	0.2	E.N.E.	0.2	E.	0.2	E. by S.	0.2
	29	—	0.0	—	0.0	—	0.0	E.	0.2	E. by S.	0.2	E. by S.	0.2
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	S.W.	0.2	S.W.	0.2	—	0.0	S.W.	0.2	S.W. by S.	0.5	S.W. by S.	0.5
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
AUGUST.	1	—	lbs. 0.0	lbs. 0.0	—	lbs. 0.0	N.N.W.	0.2	—	lbs. 0.0	—	0.0	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	S.S.W.	0.5	—	0.0	0.0	—	0.0	—	0.0	—	0.0	
	4	S.W. by S.	0.2	S.W.	0.5	S.W.	1.0	S.W.	1.0	S.W.	0.5	S.W.	0.5
	5	W. by S.	0.2	W.	0.5	W.	0.5	—	0.0	—	0.0	—	0.0
	6	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	7	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	—	0.0	—	0.0	—	0.0	E. by N.	0.2	E. by N.	0.2	E.N.E.	0.2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.N.W.	1.0	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	0.2
	11	E.S.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	12	S.S.W.	1.5	S.S.W.	0.5	S.W.	0.5	—	0.0	—	0.0	—	0.0
	13	—	0.0	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	14	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	15	S.S.W.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	S.E.	0.5	S.E.	0.5	S.E.	0.5
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N. by W.	0.5
	18	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	19	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	21	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	25	E. by S.	0.2	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2
	26	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2	N.E.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	S.W.	0.5	S.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
0.2	N.N.W.	0.3	N. by W.	0.2	S.S.E.	0.2	S.	0.2	S.	0.2	S.	0.2	S.	0.2	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
0.2	—	0.0	S. by E.	0.2	S. by E.	0.2	S.	1.0	S.S.W.	1.0	S.S.W.	1.0	S.S.W.	0.5	3
0.5	N.W. by S.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	4
0.0	—	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by S.	0.5	S.W. by S.	0.5	5
0.2	S.S.E.	0.2	S. by E.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.2	—	0.0	6
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7
0.0	—	0.0	E.	0.2	E.	0.2	E.	0.2	E. by S.	0.2	—	0.0	—	0.0	8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9
1.5	N.N.W.	0.5	N. by W.	0.5	N.W.	0.2	N. by W.	0.5	N.W. by N.	0.5	N.W. by N.	1.0	N.N.W.	1.0	10
0.2	E.	0.2	S.E. by E.	0.2	S.E. by S.	0.2	S.E.	0.2	S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	11
0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.	1.0	S. by W.	1.0	S.S.W.	1.0	S.S.W.	1.5	12
0.2	S.W.	0.2	S.S.W.	0.2	S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	13
0.2	S. by W.	0.2	S.	0.2	S.	0.5	S.	0.5	S.	0.2	S.	0.2	—	0.0	14
0.2	S. by W.	0.2	S. by W.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.	0.5	S. by W.	0.5	S. by W.	0.5	15
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16
0.5	N.	0.5	N.N.W.	0.5	N. by E.	1.0	N.E. by N.	1.0	N. by W.	1.0	N.N.W.	0.5	N.N.W.	1.0	17
0.2	S.E. by E.	0.2	S.S.E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S. by E.	0.2	S. by E.	0.2	18
1.0	E.N.E.	1.0	E.	0.0	E.	0.0	E. by S.	0.5	E.	0.5	E.	0.2	E.N.E.	0.2	19
0.0	—	0.0	S.E.	0.2	S.E.	0.2	S.E.	0.2	—	0.0	—	0.0	—	0.0	20
0.2	S.E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	21
0.0	N.E. by N.	0.2	—	—	—	—	—	—	—	—	—	—	—	0.0	22
—	—	—	E. by S.	0.2	E.S.E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	E. by S.	0.2	—	0.0	23
0.2	E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.5	E.	0.2	E. by S.	0.2	24
0.2	S.E. by E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	25
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	26
0.2	S.E. by S.	0.2	E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	27
0.2	E. by S.	0.2	E.S.E.	0.2	S.E.	0.2	W.	1.0	N.W.	1.0	W.N.W.	0.2	N.N.E.	0.2	28
0.2	E. by S.	0.2	—	—	—	—	—	—	—	—	—	—	E.N.E.	0.2	29
—	—	—	S.S.W.	0.5	S.W. by S.	1.0	S.W. by S.	1.0	S.W. by S.	1.0	S. by W.	0.5	S.S.W.	0.5	30
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31

AUGUST.

AUGUST.

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
SEPTEMBER.	1	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	2	—	0'0	—	0'0	—	0'0	S. by S.	0'2	S. by W.	0'2	S. by W.
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.
	4	—	0'0	—	0'0	W.S.W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W.
	5	W. by S.	0'2	W.S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.S.W.	0'5	S.S.W.
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	S. by E.	0'2	S. by W.
	8	—	0'0	N.N.W.	0'2	N.	0'2	N. by E.	1'0	N.E.	0'5	N.N.E.
	9	N.E.	0'5	N.E.	0'5	E.N.E.	0'5	E. by N.	2'5	E. by N.	2'5	E. by N.
	10	E. by S.	0'5	E. by S.	0'2	E. by S.	0'5	E. by S.	1'0	E.S.E.	1'0	E. by S.
	11	S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.E. by S.
	12	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.S.W.	0'2	S.S.W.
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	0'0	—	0'0	W.S.W.	0'2	S.W. by S.	0'5	S.W. by S.	1'0	S.W.
	15	N.	0'5	N.N.W.	0'5	N. by E.	1'5	N. by E.	1'5	N.	1'0	N.
	16	—	0'0	—	0'0	—	0'0	S.E. by E.	0'2	—	0'2	S.
	17	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N. by E.	0'2	S.E. by S.	0'2	S.E. by S.
	18	N. by E.	0'2	N. by E.	0'2	N. by E.	0'2	N.E.	0'2	E. by N.	0'2	E.S.E.
	19	—	0'0	—	0'0	—	0'0	W. by N.	0'2	S.S.W.	0'2	S. by W.
	20	—	—	—	—	—	—	—	—	—	—	—
	21	N.	2'0	N.	2'0	N. by W.	2'0	N.E. by N.	2'5	N.	1'0	N. by E.
	22	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	S. by E.
	23	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.
	24	N.W. by N.	0'2	N.W. by N.	0'2	N.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.
	25	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.E.	0'2	E.N.E.	0'2	E.
	26	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by W.	0'2	W.
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.
	29	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.W. by S.
	30	S.W. by S.	0'5	S.W. by S.	0'5	S.W. by S.	0'2	S.S.W.	0'5	S.W.	1'0	S.S.W.
(continued.)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
SEPTEMBER.	1	S.W.	0'2	S.W. by S.	0'2	S.W. by W.	0'2	W.S.W.	0'2	—	0'0	W.N.W.
	2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.W. by S.	0'2	S.W. by S.
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	S.S.W.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	S.W.
	5	N.	0'2	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	S.W.	0'2	—	0'0	N.W.	0'5	N.W. by N.	0'5	N.N.W.	0'5	N.N.W.
	8	N.	0'5	N.	0'2	N.N.E.	0'2	N.N.E.	0'5	N.N.E.	0'5	N.E. by N.
	9	E.	1'5	E.	1'0	E.	1'0	E.	1'0	E.	1'0	E.
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	12	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	W.	0'5	W.	0'2	W.N.W.	0'2	N.W. by W.	0'2	N.W. by W.	0'5	N.W.
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.
	16	S.S.W.	0'5	S. by W.	0'5	S.S.W.	0'5	S.W.	0'5	—	0'0	—
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	19	S.W.	0'5	S.W.	0'2	—	0'0	—	0'0	—	0'0	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	24	N. by E.	0'2	N. by E.	0'2	N. by E.	0'2	N.N.E.	0'2	N.E. by N.	0'2	N.E. by N.
	25	N.N.W.	1'0	N.N.W.	1'0	N.W. by N.	1'0	N.W.	1'0	N.W.	0'5	N.W.
	26	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	S.S.W.	0'5	S.S.W.	0'5	S.W.	0'5	—	0'0	—	0'0	S.W. by W.
	29	S. by W.	0'5	S.S.W.	0'5	S.W.	0'5	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.
	30	S.W.	1'0	S.W.	0'2	—	0'0	W.	0'2	W.N.W.	0'2	W.N.W.

DIRECTION AND FORCE OF THE WIND.

6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Getting Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
W. by N.	1'0	S.W. by S.	0'5	S.W.	1'0	S.W.	1'0	S.W.	1'0	S.W.	0'2	1
S.E. by S.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	2
S.W. by S.	0'2	S.W.	0'5	S.W. by S.	0'5	S.W. by S.	0'5	S.W. by S.	0'5	—	0'0	3
S.S.W.	0'2	S.W. by S.	0'2	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'5	4
S.W.	0'5	S.W.	0'5	S.W.	0'5	—	0'0	—	0'0	—	0'0	5
—	—	—	—	—	—	—	—	—	—	—	—	6
S. by W.	0'2	S.S.W.	1'0	S.W. by S.	1'0	S.W. by S.	1'0	S.W.	1'0	S.W.	0'5	7
N.N.E.	0'2	N.E.	0'2	E.	0'2	N. by E.	0'2	N.E. by N.	0'5	N. by E.	0'5	8
E. by N.	2'5	E. by N.	1'0	E. by N.	1'0	E. by N.	1'5	E.	2'0	E.N.E.	1'5	9
E.	1'0	E.	1'0	E.	1'0	E.	1'0	E.	1'0	E.	0'2	10
S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	11
—	0'0	E. by N.	0'5	S.	0'2	S.	0'2	—	0'0	—	0'0	12
—	—	—	—	—	—	—	—	—	—	—	—	13
S.W. by S.	0'5	S.W. by S.	0'5	S.S.W.	1'0	S.W. by S.	1'0	—	0'0	S.W.	0'5	14
N.N.W.	1'0	N.N.W.	1'0	N.W.	1'5	N.N.W.	1'0	N.W. by N.	1'0	N.	0'2	15
S.	0'2	S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	16
S.E. by S.	0'2	E.S.E.	0'2	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	17
E.S.E.	0'2	S.E.	0'5	E.S.E.	0'5	S.E.	0'2	—	0'0	—	0'0	18
S. by W.	0'2	S. by W.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	0'5	19
—	—	—	—	—	—	—	—	—	—	—	—	20
N.	0'2	N.N.W.	0'2	N. by E.	0'2	N.	0'2	N. by W.	0'2	—	0'0	21
S. by E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	22
S.	0'2	S.	0'2	S.	0'5	S. by W.	1'0	—	0'0	—	0'0	23
W. by S.	0'2	N. by W.	0'5	N. by W.	1'0	N.E. by N.	0'2	N.N.E.	0'5	N. by E.	0'2	24
E.	2'5	E.	2'5	E.N.E.	1'0	E.N.E.	0'5	N.E. by N.	0'5	N.	0'5	25
S. by W.	0'2	S. by W.	0'5	S.	0'2	S.	0'2	S.W.	0'2	S.W. by W.	—	26
—	—	—	—	—	—	—	—	—	—	—	—	27
S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.S.W.	0'2	S.S.W.	0'2	28
S.W.	1'0	S.W.	0'5	S.W. by S.	1'0	S.W. by S.	0'5	S.W. by S.	0'2	S.S.W.	0'2	29
S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	1'5	S.W. by S.	2'0	S.W.	2'0	30

SEPTEMBER.

18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Getting Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	1
W. by S.	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	0'2	—	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0	3
—	0'0	S.S.E.	0'2	—	0'0	S.W. by S.	0'2	—	0'0	—	0'0	4
—	0'0	—	0'0	W. by S.	0'2	—	0'0	—	0'0	W. by S.	0'2	5
—	—	—	—	—	—	—	—	—	—	—	—	6
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7
N.N.W.	1'0	N.N.W.	1'0	N.N.W.	1'0	N. by W.	0'5	N. by W.	0'5	N.N.E.	0'5	8
N.E. by N.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	9
E. by N.	1'0	N.E.	0'5	E.	0'5	E.	0'5	E.	0'5	S.E.	0'2	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
—	—	—	—	—	—	—	—	—	—	—	—	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
—	0'5	N.W.	0'5	N.N.W.	2'5	N.N.W.	2'5	N. W.	2'0	N.	0'5	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	17
—	0'0	N. by E.	0'2	N. by E.	0'2	N. by E.	0'2	N.	0'2	N. by E.	0'2	18
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
W. by N.	1'0	W. by N.	1'0	N.W.	1'5	N.N.W.	3'0	N.N.W.	3'0	N. by W.	3'5	20
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
N.E. by N.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by N.	0'5	N.E. by N.	0'5	N.E.	0'2	24
N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	W.N.W.	0'2	—	0'0	25
—	—	—	—	—	—	—	—	—	—	—	—	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
S.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'5	S.W.	0'2	29
N.W.	1'0	N.W.	0'5	—	0'0	—	0'0	—	0'0	N.N.W.	0'5	30

SEPTEMBER.

DIRECTION AND FORCE OF THE WIND.												
Mean Gottingen Time.	0 ^a .		1 ^b .		2 ^b .		3 ^b .		4 ^b .		5 ^b .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
1	N.N.W.	0'2	N.N.W.	1'0	N.W.	0'5	N.N.W.	0'2	N.	0'2	N. by W.	0'2
2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2
3	—	0'0	—	0'0	—	0'0	N.E.	0'2	E.	0'2	S.E. by S.	0'2
4	—	—	—	—	—	—	—	—	—	—	—	—
5	—	0'0	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	S.S.W.	0'2	S. by E.	0'2
6	N.W.	0'2	—	0'0	—	0'0	—	0'0	S.E.	0'2	E.S.E.	0'2
7	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.	0'5	S. by E.	0'2
8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.E. by E.	0'2
9	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	W.N.W.	0'2	W.N.W.	0'2
10	—	0'0	N.N.E.	0'2	N.E. by N.	0'2	N.N.E.	0'2	N.E.	0'2	E.	0'2
11	—	—	—	—	—	—	—	—	—	—	—	—
12	—	0'0	S.	0'2	S.	0'2	S.	0'5	S.	1'0	S. by W.	0'5
13	—	0'0	—	0'0	—	0'0	—	0'0	N.E. by N.	0'2	N. by E.	0'2
14	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	S. by W.	0'2
15	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2
16	S.E. by E.	0'5	S.E.	0'5	S.E.	0'5	S.E. by E.	0'2	S.E. by E.	0'2	—	0'0
17	N.N.W.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0
18	—	—	—	—	—	—	—	—	—	—	—	—
19	—	0'0	—	0'0	—	0'0	W. by S.	0'2	S.W. by S.	0'5	S.S.W.	0'5
20	S.S.E.	0'2	S. by E.	0'5	S. by W.	1'0	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2
21	—	0'0	—	0'0	—	0'0	W.	0'5	W.N.W.	0'2	S.W.	0'5
22	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	W.S.W.	0'2	N. by W.	1'0	N. by W.	2'5
23	—	0'0	—	0'0	—	0'0	—	0'0	S.E.	0'2	S. by E.	0'2
24	—	0'0	—	0'0	W.S.W.	0'2	S.W.	0'2	S.S.W.	0'5	W.N.W.	1'5
25	—	—	—	—	—	—	—	—	—	—	—	—
26	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
27	S.S.W.	0'2	N.N.W.	1'0	N.N.W.	0'5	W.N.W.	0'5	W.N.W.	0'2	N.W. by W.	0'2
28	—	0'0	—	0'0	N.W. by W.	1'0	N.N.W.	1'0	N.W.	1'5	N.W.	0'2
29	W. by N.	0'2	W. by N.	0'2	W. by N.	0'2	W. by N.	0'5	W.	0'2	W.	0'5
30	N. by W.	0'2	—	0'0	N.N.W.	0'2	N. by W.	0'2	N. by E.	0'2	N. by W.	0'2
Nov. 1	N.N.E.	1'0	N.E.	1'0	N.E.	1'0	N.E. by N.	1'5	N.E. by N.	2'0	N.E. by N.	2'5

(continued)

Mean Gottingen Time.	12 ^b .		13 ^b .		14 ^b .		15 ^b .		16 ^b .		17 ^b .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
1	E.N.E.	0'5	E.N.E.	0'5	N.E.	1'0	N.E. by N.	1'0	N.E.	1'5	N.E. by N.	1'5
2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	—	0'0	—	0'0
3	—	0'0	—	0'0	—	0'0	N.E.	0'2	—	0'0	—	0'0
4	—	—	—	—	—	—	—	—	—	—	—	—
5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
6	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
7	S.W. by S.	0'5	S.W.	0'5	S.W.	0'2	S.W.	0'2	S.W.	0'2	N.W. by N.	0'5
8	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	—	0'0
9	N.N.W.	2'5	N.	2'5	N. by E.	1'0	N.N.E.	0'5	—	0'0	—	0'0
10	—	0'0	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	E. by S.	0'2
11	—	—	—	—	—	—	—	—	—	—	—	—
12	W.S.W.	1'0	S.W. by W.	1'5	N. by W.	1'5	N. by W.	1'0	N. by W.	0'5	—	0'0
13	N.N.W.	4'0	N.N.W.	3'5	N.W. by N.	2'0	W. by N.	2'0	N.W. by W.	1'5	W. by N.	1'5
14	—	0'0	—	0'0	N.W.	0'2	—	0'0	—	0'0	W. by S.	0'2
15	—	0'0	—	0'0	N.	0'2	N.E. by N.	0'2	—	0'0	—	0'0
16	W. by S.	0'2	—	0'0	W.N.W.	0'2	W.N.W.	1'5	W.N.W.	1'5	W.N.W.	1'0
17	N.W.	0'2	—	0'0	—	0'0	N.W. by N.	0'2	N.W. by N.	0'2	N.W. by N.	0'2
18	—	—	—	—	—	—	—	—	—	—	—	—
19	S.W.	0'2	S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	S.W.	0'2
20	W.	0'5	W.	0'2	W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0
21	W.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2
22	N.W. by W.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
23	S.W.	0'2	—	0'0	—	0'0	W.S.W.	0'2	W.S.W.	0'2	—	0'0
24	W.N.W.	0'5	W.N.W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	—	0'0
25	—	—	—	—	—	—	—	—	—	—	—	—
26	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.	0'2	S.S.W.	0'2
27	N.W.	1'0	N.W.	0'2	N.W.	0'5	N. by W.	0'2	N.N.W.	0'5	N. by W.	0'2
28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
29	N.N.W.	0'2	—	0'0	—	0'0	N.W. by N.	0'2	N. by W.	0'2	N. by W.	0'2
30	N.N.E.	0'2	N.N.E.	0'2	N.E. by N.	0'2	N.E.	1'0	N.E.	0'5	N.E.	0'5
31	E. by N.	5'0	E. by N.	3'5	E. by N.	3'5	N.E.	3'5	N.E.	3'5	N.E.	4'0
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	E. by N.	0.2	E. by N.	0.2	N.E.	0.2	E.N.E.	0.5	1
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N.W. by N.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	2
0.2	S.E. by S.	0.2	S. by E.	0.2	S.E. by S.	0.2	S.E.	0.2	E.S.E.	0.2	S.E. by E.	0.2	—	0.0	3
0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
0.2	S. by E.	0.2	S.	0.5	S.	0.5	S.	0.5	S.W.	0.2	—	0.0	—	0.0	5
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	S.E.	0.5	S.E. by S.	0.2	S.S.E.	0.2	6
0.5	S. by E.	0.5	S.	0.5	S.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.W. by S.	0.5	7
0.0	S.E. by E.	0.2	E.N.E.	0.5	E.N.E.	0.5	N.E. by E.	0.5	N.E. by E.	0.2	E.N.E.	0.2	E.	0.2	8
0.2	W.N.W.	0.2	W. by N.	0.2	W. by N.	0.2	N.N.W.	2.5	N.N.W.	3.0	N.N.W.	3.0	N.N.W.	2.0	9
0.2	E.	0.2	S.W.	0.2	S.	0.2	S.E.	0.2	S.E.	0.2	S.E. by E.	0.2	—	0.0	10
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11
1.0	S. by W.	0.5	S.	0.5	S.	0.5	S.	0.5	S.	0.5	S. by W.	0.5	S. by W.	0.5	12
0.2	N. by E.	0.2	N.	0.5	N.	1.0	N.	2.5	N. by W.	3.5	N. by W.	4.5	N. by W.	5.0	13
0.2	S. by W.	0.2	S. by W.	0.2	S. by E.	0.2	S.S.E.	0.2	S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	14
0.2	N.W. by W.	0.2	W. by N.	0.5	N.W. by W.	0.2	N.W. by N.	0.2	W. by S.	0.2	W.S.W.	0.2	—	0.0	15
0.2	—	0.0	—	0.0	S.	0.5	S. by E.	0.5	S.	0.2	—	0.0	W.S.W.	0.2	16
0.0	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	N.W. by N.	0.2	N.W.	0.2	N.W.	0.2	17
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18
0.5	S.S.W.	0.5	S.W.	1.0	W.S.W.	1.0	W.S.W.	1.0	S.W.	0.5	S.W.	0.2	S.W.	0.2	19
0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.S.W.	0.5	W. by S.	2.0	W. by S.	1.5	W.S.W.	1.0	W. by N.	0.5	20
0.2	S.W.	0.5	W.S.W.	1.5	W. by S.	1.0	W.N.W.	1.0	W.N.W.	0.5	W. by S.	0.5	—	0.0	21
1.0	N. by W.	2.5	N. by W.	2.5	N. by W.	2.5	N.	2.5	N.	2.5	N.W. by W.	2.0	N.W. by W.	1.5	22
0.2	S. by E.	0.2	—	0.0	S.	0.2	W.S.W.	0.5	—	0.0	S.W. by W.	0.5	W.S.W.	0.5	23
0.5	W.N.W.	1.5	W.	2.5	W. by N.	2.5	N.N.W.	2.5	N.W.	2.0	N.W. by N.	1.5	W.N.W.	1.0	24
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25
0.0	—	0.0	E. by S.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E.S.E.	0.2	26
0.2	N.W. by W.	0.2	W. by S.	0.2	W.N.W.	0.2	N.W. by W.	0.2	N.W. by N.	0.5	N.N.W.	1.0	N.N.W.	1.0	27
1.5	N.W.	0.2	N.W. by W.	0.2	N.N.W.	0.2	N.W.	0.2	W. by N.	0.2	N.N.W.	0.2	—	0.0	28
0.2	W.	0.5	W.N.W.	0.2	W.	0.5	W.	0.5	N.W. by N.	0.5	—	0.0	—	0.0	29
0.2	N. by W.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.5	N. by E.	0.2	N.E.	0.2	N.N.E.	0.2	30
2.0	N.E. by N.	2.0	N.E.	2.0	N.E. by N.	2.5	N.E.	3.0	N.E.	2.0	N.E.	3.5	E. by N.	5.0	31
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 Nov.

17 ^h .			18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
1.5	N.E. by N.	1.5	N.E. by N.	0.5	N. by E.	0.5	N. by E.	0.2	N.N.E.	0.2	N. by E.	0.2	N.N.E.	0.2	1
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	4
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
0.2	N.W. by N.	0.5	S.S.W.	0.5	S.E.	0.2	S.	0.2	S.S.W.	0.2	N.W.	0.2	N.W.	0.2	6
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.2	E. by S.	0.2	S.E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	—	0.0	—	0.0	—	0.0	9
0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
1.5	W. by N.	1.5	W. by N.	0.2	W. by N.	0.5	W. by N.	0.5	W.	0.2	—	0.0	—	0.0	11
0.0	W. by S.	0.2	—	0.0	N.E. by N.	0.2	S.E. by S.	0.5	S.E. by S.	0.2	S.E. by S.	1.0	S.E. by S.	0.5	12
0.0	—	0.0	—	0.0	N.W.	0.5	N.W. by W.	2.0	N.W. by W.	1.0	N.W.	1.5	N.W.	1.5	13
1.5	W.N.W.	1.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14
0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	S.S.W.	0.2	W.S.W.	0.5	—	0.0	16
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	S.W.	1.0	S.S.W.	1.0	18
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	23
0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.5	S. by W.	1.0	S. by W.	0.5	S.S.W.	0.5	S.S.W.	0.2	24
0.5	N. by W.	0.2	N.N.E.	0.2	N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	25
0.0	—	0.0	—	0.0	W. by S.	0.2	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	26
0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	27
0.5	N.E.	0.5	N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	N.N.E.	1.5	28
3.5	N.E.	4.0	—	—	—	—	—	—	—	—	—	—	—	—	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 Nov.

* Portion of 1st November.

3 E 2

DIRECTION AND FORCE OF THE WIND.													
Mean Gottingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
NOVEMBER.	2	N.E.	lbs. 3.0	N.E.	lbs. 2.5	N.E.	lbs. 2.5	E.N.E.	lbs. 1.0	E.N.E.	lbs. 0.5	E.N.E.	lbs. 0.5
	3	S.W. by S.	0.2	N.W. by S.	0.2	N.W. by S.	0.2	S.W. by S.	0.2	S.W. by W.	0.2	S.S.W.	0.2
	4	—	0.0	—	0.0	N.W. by W.	0.2	N.W.	0.5	N.N.W.	1.0	N.N.W.	0.5
	5	N.	0.2	—	0.0	N.	0.2	N. by E.	0.2	N. by E.	0.2	E.S.E.	0.2
	6	N.	0.2	N.	0.2	N.	0.2	—	0.0	N.E.	0.2	N.E. by E.	0.2
	7	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	E.N.E.	0.2
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.E.	0.2
	10	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	11	E.N.E.	0.2	—	0.0	E.N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2
	12	N. by E.	0.5	N.N.E.	0.5	N. by E.	0.5	N. by E.	0.5	N.	0.5	N. by E.	0.5
	13	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.5
	14	E. by N.	0.2	E. by S.	0.5	E.	0.2	E. by S.	0.2	E. by N.	0.5	E.N.E.	0.2
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	0.0	N.	0.2	N. by E.	0.2	—	0.0	—	0.0	E.N.E.	0.2
	17	—	0.0	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.5	E.S.E.	1.0	E.S.E.	0.5
	18	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by W.	0.5	W. by S.	1.5
	19	—	0.0	—	0.0	N. by E.	0.2	N. by E.	0.2	N.N.W.	0.2	N.	0.2
	20	W.N.W.	2.0	N.W. by W.	2.5	N.W. by W.	2.5	N.W.	2.0	N.N.W.	2.5	W. by N.	1.0
	21	S.W.	0.2	S.W.	0.2	S.W.	0.2	S.W.	0.2	S.W.	1.0	W.S.W.	1.0
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	W.N.W.	0.2	W. by N.	0.2	W.S.W.	0.5
	24	—	0.0	—	0.0	W.	0.2	—	0.0	W.	0.2	W.	0.2
	25	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	1.5	N.	2.5	N.	2.5
	26	W.N.W.	1.0	W.N.W.	1.5	W. by N.	1.5	W.	3.0	W.N.W.	3.0	W.	1.0
	27	W.S.W.	2.0	S.W.	1.0	S.W.	0.5	S.W.	0.5	W.S.W.	0.2	S.W.	0.2
	28	—	0.0	—	0.0	S.W.	0.5	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.5
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	N. by E.	0.5	N. by E.	0.2	—	0.0	—	0.0	—	0.0	N. by E.	0.5
	(continued)												
Mean Gottingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
NOVEMBER.	2	—	lbs. 0.0	—	lbs. 0.0	—	lbs. 0.0	—	lbs. 0.0	—	lbs. 0.0	—	
	3	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	W. by N.	0.2	—	
	4	N.W. by N.	0.2	N.W. by N.	0.2	N.W. by N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	
	5	E.	0.2	N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	
	6	N.E.	0.2	N.E.	0.2	N.E.	0.2	—	0.0	—	0.0	N.N.E.	
	7	E.	0.2	E.	0.5	E. by N.	0.2	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	
	8	—	—	—	—	—	—	—	—	—	—	—	
	9	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	
	10	E.N.E.	0.2	E.N.E.	0.5	E.N.E.	1.0	E.N.E.	1.5	E.N.E.	2.0	E.N.E.	
	11	N. by W.	0.2	N. by E.	0.2	N.N.E.	0.2	N. by W.	0.2	N.E. by N.	0.2	N.	
	12	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	
	13	—	0.0	—	0.0	E.	0.5	E. by S.	0.5	E. by N.	0.5	E.	
	14	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	
	15	—	—	—	—	—	—	—	—	—	—	—	
	16	—	0.0	—	0.0	—	0.0	—	0.0	E. by S.	0.2	E. by S.	
	17	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	E.	
	18	W.N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	
	19	N. by W.	3.0	N.N.W.	3.5	N.N.W.	3.0	N.W.	3.0	N.W.	3.5	N.W.	
	20	W. by S.	0.5	W.S.W.	0.2	W.S.W.	0.2	—	0.0	—	0.0	—	
	21	S.S.W.	0.5	S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.5	S.W.	0.5	W. by N.	
	22	—	—	—	—	—	—	—	—	—	—	—	
	23	S.W. by S.	0.2	S.W. by S.	0.2	W.S.W.	0.2	—	0.0	—	0.0	S.W.	
	24	N. by W.	0.2	N.N.W.	0.2	N. by W.	0.2	—	0.0	—	0.0	—	
	25	N. by W.	3.0	N. by W.	3.0	N.N.W.	3.5	N.N.W.	2.0	N.N.W.	2.0	N.W. by W.	
	26	W.S.W.	4.0	W.S.W.	4.0	W.S.W.	3.0	W.S.W.	4.0	W.S.W.	3.5	W.S.W.	
	27	S.S.W.	2.0	S.S.W.	3.0	S.S.W.	2.5	S.W.	2.0	S.W.	1.5	S.W.	
	28	S.W. by W.	0.2	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	
	29	—	—	—	—	—	—	—	—	—	—	—	
	30	N.	2.0	N.	0.5	N.	0.2	N. by E.	0.2	—	0.0	—	

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0.5	E.N.E.	0.5	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	2	
0.2	S.S.W.	0.2	W. by N.	0.2	W.	0.2	W.	0.2	W.N.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	—	0.2	—	0.2	—	3	
1.0	N.N.W.	0.5	N.W. by N.	0.2	N.W.	0.5	N.W.	0.5	N.W.	0.5	N.W.	0.5	N.W.	0.5	N.W. by N.	0.2	N.W. by N.	0.2	N.W. by N.	4	
0.2	E.S.E.	0.2	S. by E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	E.	0.2	E.	5	
0.2	N.E. by E.	0.2	E.	0.2	N.E. by E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	6	
0.2	E.N.E.	0.2	E. by N.	0.5	E.	0.5	E.	0.5	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.2	E.	0.2	E.	0.2	E.	7	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	
0.0	S.S.E.	0.2	S. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	9	
0.0	—	0.0	E.S.E.	0.2	E. by N.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	10	
0.2	N. by E.	0.2	N. by E.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.0	—	0.0	—	0.0	—	11	
0.5	N. by E.	0.5	N. by E.	0.5	N.	0.2	N.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	12	
0.2	E. by N.	0.5	E. by N.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E. by N.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	13	
0.5	E.N.E.	0.2	E.N.E.	0.2	E.	1.5	E.	1.5	E.	1.5	E. by N.	1.5	E. by N.	1.5	E. by N.	0.5	E. by N.	0.5	E. by N.	14	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	
0.0	E.N.E.	0.2	E. by N.	0.2	—	0.0	—	0.0	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	16	
1.0	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.2	E.S.E.	0.2	E.	0.5	E. by N.	0.5	E. by N.	0.5	E. by N.	0.5	E. by N.	0.5	E. by N.	17	
0.5	W. by S.	1.5	W.S.W.	2.0	W. by S.	0.5	W. by S.	1.0	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	18	
0.2	N.	0.2	N. by W.	0.2	N.	0.2	N. by W.	1.0	N. by W.	0.5	N.N.W.	1.5	N. by W.	2.5	N. by W.	2.5	N. by W.	2.5	N. by W.	19	
2.5	W. by N.	1.0	N.W. by W.	3.0	W.N.W.	2.5	W. by N.	2.0	W. by N.	1.5	W.N.W.	1.5	W. by N.	0.5	W. by N.	0.5	W. by N.	0.5	W. by N.	20	
1.0	W.S.W.	1.0	S.W.	0.5	S.W.	0.5	S.S.W.	1.0	S. by W.	1.0	S.S.W.	2.0	S.S.W.	2.0	S.S.W.	2.0	S.S.W.	2.0	S.S.W.	21	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	
0.2	W.S.W.	0.5	W.N.W.	0.5	N.W. by W.	0.5	W. by S.	0.2	W. by S.	0.2	S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	23	
0.2	W.	0.2	W.	0.2	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	24	
2.5	N.	2.5	N.	3.5	N.N.W.	3.0	N.N.W.	3.5	N.N.W.	4.0	N.W.	3.5	N.N.W.	3.0	N.N.W.	3.0	N.N.W.	3.0	N.N.W.	25	
3.0	W.	4.0	W.	6.0	W.	10.0	W.	10.0	W.S.W.	8.0	W.S.W.	5.0	W.S.W.	4.5	W.S.W.	4.5	W.S.W.	4.5	W.S.W.	26	
0.2	S.W.	0.2	S.W.	0.2	—	0.0	S.E. by S.	0.2	S.E. by S.	0.5	S.E. by S.	0.5	S.E. by S.	1.5	S.E. by S.	1.5	S.E. by S.	1.5	S.E. by S.	27	
0.2	S.W. by W.	0.5	W. by S.	0.5	W.S.W.	0.5	W.S.W.	2.0	W.S.W.	1.5	S.W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	28	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29	
0.0	N. by E.	0.5	N. by E.	0.2	N. by W.	1.5	N.N.W.	1.5	N.W. by W.	1.5	N.W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	30	

NOVEMBER.

17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			23 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	2	
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	3	
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	4	
0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	5	
0.0	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	6	
0.5	E.N.E.	0.5	E.N.E.	1.0	E.N.E.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	7	
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	8	
0.0	—	0.0	E.N.E.	2.5	N.E. by N.	1.0	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.2	E.N.E.	0.5	—	—	—	9	
2.0	E.N.E.	2.0	N.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.5	N.	0.5	N.	0.5	N.	10	
0.2	N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	11	
0.0	—	0.0	E. by S.	0.2	E. by S.	0.5	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	12	
0.5	E.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	
1.0	E.N.E.	1.0	N.W. by W.	0.5	N.W. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	14	
—	—	—	E.S.E.	0.2	S.E. by E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	15	
0.2	E.	0.2	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	16	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	17	
3.5	N.W.	3.5	N.W.	3.5	N.W. by W.	3.5	N.W.	3.5	N.W.	3.5	N.W.	3.5	N.W.	2.5	N.W.	1.5	N.W.	1.5	N.W.	18	
0.0	—	0.0	—	0.0	W.S.W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	S.W.	19	
0.5	W. by N.	1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	
—	—	—	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W. by N.	0.2	W. by N.	21	
0.0	S.W.	0.2	S.W.	0.5	S.S.W.	0.5	S.W.	0.2	S.W.	0.2	S.W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	22	
0.0	—	0.0	N. by W.	0.2	N. by E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	23	
2.0	N.W. by W.	0.5	N.N.W.	1.5	W. by N.	1.5	W. by N.	1.0	W. by N.	1.0	W. by N.	1.0	W. by N.	1.0	W. by N.	1.5	W.N.W.	1.5	W.N.W.	24	
3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.0	W.S.W.	2.0	W.S.W.	2.0	W.S.W.	25	
1.5	S.W.	0.5	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	26	
0.0	—	0.0	N.W.	1.5	N.W.	1.5	N.W.	1.0	N.W.	1.0	N.W.	1.0	N.W.	0.2	N.W.	0.2	N.	0.5	N.	27	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	28	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	29	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	30	

NOVEMBER.

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
DECEMBER.	1	—	0'0	—	0'0	—	0'0	N.E. by N.	0'2	N.E. by N.	0'2	N.E.
	2	E. by N.	1'5	E.N.E.	2'0	E.N.E.	2'0	E.	2'0	E.	2'0	E.
	3	W.S.W.	3'0	W.S.W.	2'5	W.S.W.	3'0	W.S.W.	3'0	W.S.W.	3'0	W.S.W.
	4	S.W. by W.	2'0	W.S.W.	2'5	W.S.W.	3'0	W. by S.	2'5	W. by S.	3'0	W. by S.
	5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	E. by S.	0'5	E. by S.	0'5	E. by S.	0'5	E.S.E.	0'5	E.S.E.	0'2	E.S.E.
	8	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'2	N.W.
	9	N.N.W.	0'2	N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N. by W.	0'2	N.N.E.
	10	W.S.W.	2'5	W.S.W.	3'0	W.S.W.	3'0	W. by S.	2'0	W. by S.	1'5	S.W. by W.
	11	N. by W.	0'2	N.N.W.	0'2	N. by W.	0'2	—	0'0	—	0'0	N.N.W.
	12	—	0'0	—	0'0	—	0'0	N. by W.	0'5	N.	0'2	N.N.W.
	13	—	—	—	—	—	—	—	—	—	—	—
	14	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	2'0	N.N.W.
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'2	W.
	16	—	0'0	—	0'0	N. by E.	0'2	N.E. by N.	0'2	N.E.	0'2	E.N.E.
	17	N.E. by N.	1'0	N.E. by N.	1'0	N.E. by N.	1'0	N.E. by N.	0'5	N.E.	0'5	N.E.
	18	—	0'0	—	0'0	—	0'0	N. by E.	0'2	—	0'0	N. by E.
	19	W.N.W.	0'2	W.N.W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	N.W. by N.	2'0	N.W.
	20	—	—	—	—	—	—	—	—	—	—	—
	21	N.N.W.	0'5	N.N.W.	1'0	N.N.W.	0'2	N.N.W.	1'5	N.N.W.	2'0	N.W.
	22	N.E.	0'5	N.E.	0'5	N.N.E.	0'5	N. by W.	0'5	N.N.E.	0'5	N.
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	24	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	0'0	—	0'0	W.N.W.	0'2	—	0'0	—	0'0	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	0'0	N.N.W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.
	29	—	0'0	—	0'0	—	0'0	N.E.	0'2	E. by N.	0'5	E.
	30	E. by S.	0'5	E. by S.	0'2	—	0'0	S.	0'2	S.W.	0'2	S.W.
	31	—	0'0	—	0'0	—	0'0	S.E.	0'2	—	0'0	—

(continued)

Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
DECEMBER.	1	E.	0'5	—	2'5	E. by N.	2'5	E. by N.	2'5	E. by N.	3'5	E. by N.
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W.
	3	W. by S.	2'5	W. by S.	2'5	W. by S.	2'5	W. by S.	3'5	W.	2'0	S.W. by W.
	4	N.W.	0'5	W. by N.	0'2	W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.
	5	N.N.E.	0'2	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.
	6	—	—	—	—	—	—	—	—	—	—	—
	7	S.E.	0'2	E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	E. by S.
	8	—	0'0	N. by E.	0'2	N. by E.	0'2	—	0'0	—	0'0	—
	9	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.E.	0'2	N.E.
	10	N.	0'2	N. by W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.W. by N.
	11	N.W. by N.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N.W.	0'5	N.W.	0'2	N.W.
	12	N.W.	0'2	N. by W.	0'5	N.N.W.	1'0	N.	0'5	N.	0'5	N.
	13	—	—	—	—	—	—	—	—	—	—	—
	14	N.W. by W.	0'5	N.W. by W.	0'5	N.W. by W.	0'5	—	0'0	—	0'0	—
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	16	N.E.	1'0	N.E. by E.	1'5	E. by N.	2'0	E. by N.	1'5	N.E.	1'0	N.E.
	17	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.W.
	19	N.W. by W.	1'5	W.N.W.	1'0	W.N.W.	1'5	W.N.W.	1'0	W.N.W.	1'0	W.N.W.
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	24	—	0'0	W.S.W.	0'2	W.S.W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W.
	25	—	—	—	—	—	—	—	—	—	—	—
	26	S.S.W.	2'0	S.S.W.	1'5	S.S.W.	1'0	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.
	27	—	—	—	—	—	—	—	—	—	—	—
	28	N.N.W.	0'2	N.W.	3'0	N.W. by W.	2'0	N.W. by W.	1'0	N.W. by W.	0'2	N.W.
	29	E.	1'5	E.	1'5	E.	2'0	E.	3'0	E.	2'5	E.
	30	S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	—
	31	—	0'0	—	0'0	—	0'0	N.E.	0'2	—	0'0	N.E. by N.

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.2	N.E.	0.2	N.E.	0.2	E. by S.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	E.	0.2	E.	0.2	1
2.0	E.	1.0	E.	0.5	—	0.0	E. by N.	0.2	E.N.E.	0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	2
3.0	S.W.	3.0	S.W.	3.0	S.W. by W.	3.0	W. by S.	3.5	W.S.W.	2.5	W. by S.	2.0	W. by S.	2.0	W. by S.	2.5	W. by S.	2.5	W. by S.	2.5	3
3.0	W. by S.	3.0	W.	2.5	W. by N.	2.0	W.	0.5	W. by S.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W.	1.0	N.W.	1.0	N.W.	1.0	4
0.0	—	0.0	W. by N.	0.2	W.	0.2	W. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.	0.2	E.	0.2	E.S.E.	0.2	E.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	6
0.2	N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	7
0.2	N.N.E.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
1.5	S.W. by W.	1.0	S.W. by W.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
0.0	N.N.W.	1.0	N.W.	1.5	N.W.	1.5	N.W. by W.	1.0	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by N.	0.2	N.W. by N.	0.2	N.W. by N.	0.2	10
0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.W.	1.0	N.W.	1.0	N.W.	0.5	11
—	—	—	N.N.W.	1.0	N.N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by W.	0.5	12
0.2	W.	0.2	W.N.W.	0.2	—	0.0	W.S.W.	0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
0.2	E.N.E.	0.2	E.	0.2	E.	0.5	E. by N.	0.5	E. by N.	0.5	E. by N.	0.5	E.N.E.	1.0	N.E.	1.0	N.E.	1.0	N.E.	1.0	14
0.5	N.E.	1.0	N.E. by E.	0.5	N.E. by E.	0.5	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	15
0.0	N. by E.	0.2	N. by E.	0.2	N.	0.2	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	—	0.0	—	0.0	—	0.0	16
2.0	N.W.	1.5	N.W. by N.	2.0	N.W. by N.	2.0	N.W.	2.5	N.W.	2.5	N.W.	2.5	N.W.	2.5	N.W.	2.0	N.W. by W.	1.0	N.W. by W.	1.0	17
—	—	—	N.W.	0.2	N.W.	0.2	N.W. by W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	—	—	—	—	—	—	18
0.5	N.	0.5	N. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
0.2	S. by E.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	—	—	—	—	—	—	21
—	—	—	S.W. by S.	0.5	S.W. by S.	0.5	S.S.W.	0.5	S.S.W.	1.5	S.S.W.	1.5	S.S.W.	1.5	S.S.W.	2.5	S.S.W.	2.5	S.S.W.	2.5	22
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23
0.2	N. by W.	0.2	N.W. by N.	1.5	N.N.W.	1.0	N.W. by N.	1.0	N.N.W.	1.5	N.N.W.	1.5	N.N.W.	0.5	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	24
0.5	E.	0.5	E. by S.	1.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	E.	0.5	E. by S.	2.0	E. by N.	1.5	E. by N.	1.5	E. by N.	1.5	25
0.2	S.W.	0.2	S.W. by W.	0.2	W.S.W.	1.0	W.S.W.	1.0	N.E. by E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	—	0.0	—	0.0	—	0.0	26
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27

DECEMBER.

DECEMBER.

DIRECTION AND FORCE OF THE WIND.

5 ^h .			DIRECTION AND FORCE OF THE WIND.										Mean Göttingen Time.		
Force.	Direction.	Force.	6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .			11 ^h .	
			Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Direction.	Force.
lbs.		lbs.													
0.2	N. by E.	0.2	N.N.E.	0.2	N.E. by N.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	E.N.E.	1.0	1
2.0	S.W. by W.	2.0	S.W. by W.	2.0	S.W. by W.	1.5	S.W. by W.	1.0	S.W.	1.5	S.W. by S.	1.5	S.W.	0.2	2
3.0	E.	3.0	E.	2.5	E.	2.5	E.	3.0	E.	3.0	E. by S.	3.0	E.	2.5	3
5.0	S.W. by W.	5.0	W.S.W.	3.5	W.S.W.	3.5	S.W.	3.0	S.W.	3.0	S.W.	3.0	W.S.W.	2.5	4
0.0	N.W.	0.2	N.	0.2	N.	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
1.0	N.W. by N.	1.5	N.W.	2.5	N.W.	2.5	N.W.	3.5	N.W.	3.5	N.W.	3.0	W.N.W.	2.5	6
3.5	W.S.W.	5.0	W.S.W.	6.5	W.S.W.	4.5	S.W. by W.	3.0	W.S.W.	2.5	S.W. by W.	2.5	S.W. by W.	2.0	7
0.2	W.	0.2	W.	0.2	W.	0.2	W.S.W.	1.0	W. by N.	1.0	W. by N.	1.0	W. by N.	0.5	8
1.0	S.W. by W.	2.0	W.S.W.	2.5	W.S.W.	2.0	W.	1.5	W.	1.0	W.S.W.	0.5	W.S.W.	1.5	9
1.5	W.S.W.	1.5	W.	2.5	W.	2.0	W.	1.5	W.	0.5	W. by S.	0.2	—	0.0	10
0.2	S.W.	0.2	S.W. by S.	0.2	S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	1.5	11
0.0	—	0.0	—	0.0	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	12
0.5	E.S.E.	0.5	E.S.E.	0.2	S.S.W.	0.2	S. by W.	0.2	S.	0.2	E.S.E.	0.2	—	0.0	13
2.0	W. by S.	2.0	N.W. by W.	3.5	W.N.W.	3.5	N.W.	3.5	N.W.	4.5	W.N.W.	4.0	W.N.W.	3.0	14
0.0	—	0.0	—	0.0	—	0.0	W.S.W.	0.5	W. by S.	2.0	W.	1.5	W. by S.	0.5	15
0.0	W. by S.	3.0	W.	3.0	W.N.W.	2.5	W. by N.	2.5	W. by N.	2.5	W. by N.	2.5	W. by N.	1.5	16
0.2	W.S.W.	0.5	W.S.W.	1.5	S.W. by W.	1.5	S.W.	1.0	S.W.	1.0	W.S.W.	0.5	W.S.W.	0.5	17
3.0	N.W.	2.5	N.W. by N.	1.5	N.N.E.	1.0	E.	1.5	E.	1.0	N. by W.	0.5	N. by W.	0.2	18
1.5	S.W. by W.	1.0	W.S.W.	1.5	W.S.W.	1.5	W. by S.	1.0	W. by S.	1.5	W.S.W.	1.0	S.W.	1.5	19
2.0	W.	2.5	W.N.W.	2.0	W. by N.	3.0	W. by N.	2.0	W. by N.	1.5	W. by N.	1.0	—	0.0	20
0.5	E.N.E.	0.5	E.N.E.	0.5	E. by S.	0.2	E. by N.	0.2	E. by S.	0.2	E. by S.	0.5	E. by S.	0.5	21
0.5	S.	0.5	S.	0.5	N.W. by W.	0.5	N.W. by N.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.W.	0.5	22
0.5	N.N.W.	0.5	N.N.W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	0.5	N. by W.	0.5	N.	0.2	23
0.0	—	0.0	—	0.0	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	24
0.0	N.E.	0.2	N.E.	0.2	N.E. by E.	0.5	E. by N.	1.0	N.E. by E.	2.0	N.E.	1.5	N.E.	1.0	25
2.0	N. by W.	3.0	N.W.	2.5	N.W. by N.	2.0	N.W. by N.	2.0	N.N.W.	2.0	N. by W.	0.5	N. by W.	0.5	26
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31

JANUARY.

16 ^h .		17 ^h .		18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.	
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
2.0	E.	2.5	—	—	S.E.	1.0	—	0.0	W.	1.5	W.S.W.	1.5	W.S.W.	1.5	S.W.	2.0	1
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
1.0	S.	4.0	—	—	0.0	N.E. by N.	0.2	E.	0.2	E.	0.5	E.	2.0	E. by N.	2.5	3	
1.5	W.S.W.	1.5	—	—	3.5	S.W. by S.	3.0	S.W. by S.	3.0	S.W. by S.	3.5	S.W. by S.	3.5	S.W.	4.5	4	
0.2	N. by E.	0.5	—	—	1.5	W.N.W.	1.0	W. by N.	1.0	W. by S.	1.0	W. by S.	0.2	—	0.0	5	
2.5	W. by N.	1.5	—	—	0.5	N.	0.2	N. by E.	0.2	N. by E.	0.2	N.	0.2	N.	0.2	6	
1.0	W.S.W.	1.5	—	—	1.0	W.	0.5	W.	0.5	W. by S.	3.0	W.S.W.	3.5	S.W. by W.	3.5	7	
1.0	W.S.W.	1.0	—	—	1.5	W.S.W.	0.5	W.S.W.	0.5	W. by S.	0.5	W. by S.	0.5	W. by S.	0.5	8	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	
1.0	W.S.W.	1.0	—	—	0.0	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	
0.0	—	0.0	—	—	—	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	1.0	S.W. by W.	0.5	S.W. by W.	0.5	11	
0.2	S.W. by W.	0.2	—	—	0.0	W. by S.	0.5	S.W.	1.5	S.W.	0.2	S.W. by S.	0.2	S.S.W.	0.2	12	
0.0	—	0.0	—	—	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	13	
0.0	—	0.0	—	—	—	—	0.0	0.0	0.0	E.	0.2	E.	0.5	E. by S.	1.0	14	
2.5	N.N.E.	0.5	—	—	0.5	N. by E.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	W. by N.	0.5	15	
—	W. by N.	1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	16	
—	—	—	—	—	E.S.E.	1.0	E.S.E.	0.2	S.E. by E.	0.2	S.E.	0.2	S.E. by S.	0.2	S. by E.	0.2	17
1.5	W. by N.	0.2	—	—	0.5	W.N.W.	1.0	N.W. by W.	2.0	N.W.	2.5	N.W. by W.	3.0	W.N.W.	2.0	18	
1.5	S.W. by W.	1.5	—	—	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	19	
0.5	W.S.W.	0.5	—	—	0.5	W.S.W.	0.5	W.S.W.	0.2	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	20	
0.5	W.S.W.	1.0	—	—	1.0	W.S.W.	1.5	W.S.W.	2.0	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	1.5	21	
2.5	W.S.W.	2.0	—	—	3.0	S.W.	3.5	S.W.	3.0	S.W.	3.5	S.W.	3.5	S.W.	2.5	22	
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	23	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	
0.2	E. by N.	0.5	—	—	0.2	—	—	0.0	—	0.0	—	0.0	—	0.0	—	25	
0.2	N.W.	0.2	—	—	0.5	E. by N.	1.0	E.	1.5	E.	1.5	E.	2.0	E.N.E.	2.5	26	
0.0	—	0.0	—	—	0.2	N.	0.5	N. by W.	0.5	—	0.0	N.N.W.	0.5	N. by E.	0.2	27	
0.0	—	0.0	—	—	0.0	—	0.0	0.0	0.0	—	0.0	—	0.0	—	0.0	28	
0.0	N.N.E.	0.2	—	—	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	29	
2.0	N. by E.	2.5	—	—	2.0	N.	2.0	N. by W.	2.5	N. by W.	2.5	N. by W.	2.0	N.N.W.	2.5	30	
1.5	N.W. by N.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	31	
—	—	—	—	—	0.0	—	—	0.0	—	0.0	—	N.E.	0.2	—	0.0	32	

JANUARY.

JANUARY.

[illegible]*(continued)*[illegible]

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.													
0'0	—	0'0	E. by S.	0'2	—	0'0	S. by W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	1
0'2	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	S.E.	0'2	2
0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'2	N.N.W.	0'5	N.N.W.	3'0	N.W.	4'0	N.N.W.	5'5	3
3'0	N.W.	3'0	W.N.W.	1'5	N.W.	2'0	N.W.	2'5	N.W.	2'5	W. by N.	2'0	W.N.W.	1'5	4
0'2	N. by E.	0'2	N. by W.	0'2	N. by W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0	5
0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by E.	0'2	—	0'0	6
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
0'5	S.W.	0'5	S.W.	0'2	S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	8
0'2	W.S.W.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	9
0'2	—	0'0	N. by W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W.	0'2	S.W. by W.	0'5	S.W. by W.	0'2	10
0'2	W. by N.	0'2	W.	0'5	W. by S.	0'5	W. by S.	1'0	W. by S.	1'0	S.W. by W.	1'0	W.S.W.	0'5	11
0'0	—	0'0	—	0'0	S.S.W.	0'2	S. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N. by W.	2'0	12
0'2	S.W. by W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	1'0	W. by S.	0'5	W. by S.	1'0	W. by S.	0'2	13
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14
1'0	N.N.E.	1'0	N.	1'5	N.	1'5	N.	1'0	N.E.	0'5	N.N.E.	0'2	N.N.E.	0'2	15
0'5	N.E.	0'5	N.E.	0'2	E. by N.	3'0	E.	3'0	E.N.E.	2'0	E. by N.	2'0	E.N.E.	1'0	16
0'5	S.W.	0'5	S.W. by W.	0'5	S. by W.	1'0	W.S.W.	1'0	W.	1'0	W.	1'0	W.	0'5	17
0'2	S.E.	0'2	S. by W.	0'2	S. by W.	0'2	S.S.E.	0'2	S.E. by S.	0'2	E. by S.	0'2	E.	0'2	18
0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	E.	0'2	—	0'0	—	0'0	—	0'0	19
0'5	N.E. by E.	0'5	E. by N.	1'0	E. by N.	1'0	E. by N.	1'0	E. by N.	0'5	E. by N.	0'5	E.N.E.	0'5	20
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21
0'2	N.	0'2	N.	0'2	N.N.E.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	22
0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'2	—	0'0	23
0'0	—	0'0	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2	E.N.E.	0'2	24
0'2	N.E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'2	E. by S.	0'2	E.S.E.	0'2	S.E. by S.	0'2	—	0'0	25
0'2	E. by S.	0'2	E. by N.	0'5	E. by N.	1'5	E. by N.	1'0	E.N.E.	1'5	E. by N.	1'5	E. by N.	2'5	26
5'0	E.	5'5	E.	5'5	E.	5'0	E.	3'5	E.	3'0	E.	1'5	E.	1'5	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28

FEBRUARY.

17 ^h .			18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.													
0'0	S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
0'0	—	0'0	—	0'0	S.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	2
6'0	N.W.	8'0	N.W.	5'0	N.W. by W.	7'0	W.N.W.	5'0	W.N.W.	4'0	W.N.W.	4'0	W.N.W.	5'0	3
0'2	N.W. by W.	0'2	N.W. by W.	0'2	N.W.	0'2	N.W. by N.	0'5	N.W. by N.	0'2	N.W. by N.	0'2	N.N.W.	0'2	4
0'2	N. by W.	0'2	N.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	5
0'0	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	6
0'5	E. by N.	0'5	N.E.	0'5	N.N.E.	0'5	N. by E.	0'5	N.N.W.	0'5	N.N.W.	0'5	N.W. by W.	0'5	7
0'0	—	0'0	S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
0'5	W.S.W.	0'2	—	—	—	—	—	0'0	N.W. by W.	0'2	W. by N.	0'2	—	0'0	12
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13
1'0	N.E.	1'5	N.E.	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	14
0'5	N.N.W.	0'5	N.N.W.	0'5	E.N.E.	1'5	E. by N.	3'0	E.	3'0	E.	3'0	E.N.E.	1'0	15
0'2	N. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
0'2	E.N.E.	0'2	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'5	N.E. by N.	0'5	N.E. by N.	0'5	—	0'0	18
0'5	E.N.E.	1'0	—	0'0	—	0'0	E. by S.	0'5	E. by S.	0'5	E. by S.	0'5	E.N.E.	0'5	19
—	—	—	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	20
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
0'2	N.N.E.	0'2	N.E.	0'2	N.E. by E.	0'5	E.N.E.	0'5	N.E.	0'2	N.E.	0'2	N.E.	0'2	23
0'0	—	0'0	E.	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
3'0	E.	3'5	—	3'5	E.	3'5	E.	3'5	E.	3'5	E.	4'0	E.	4'0	25
3'5	S.W.	3'5	—	—	—	—	—	—	—	—	—	—	—	—	26
—	—	—	N.W. by W.	1'5	W.N.W.	1'5	W.N.W.	2'5	N.W. by W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28

FEBRUARY.

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	W.	0.5	W.N.W.	0.5	W.N.W.	1.0	N.W. by W.	1.5	N.W.	5.0	N.W.
	2	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.N.W.
	3	—	0.0	S. by E.	0.2	S. by E.	0.2	S.S.E.	0.2	S.E. by S.	0.2	S.E. by S.
	4	N.W. by N.	0.2	—	0.0	N.W. by N.	0.2	N.W.	0.2	N.N.W.	0.2	N. by W.
	5	E.	0.2	N.E. by N.	0.2	N.	0.2	N.	0.2	—	0.0	0.0
	6	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E. by N.	0.5	E.
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	E.	0.2	E.	0.5	N.W.	0.5	W.N.W.
	9	N.N.E.	0.2	N.E.	0.5	E.N.E.	0.5	E. by N.	1.5	E.	2.5	E.
	10	N.W. by N.	0.2	N.W. by N.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	S.W. by W.
	11	N. by W.	0.2	—	0.0	—	0.0	W.	0.2	N.	0.2	N. by E.
	12	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N.W.	0.2	N. by E.
	13	N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	W. by S.	0.5	S.W. by W.	0.5	S.W. by W.	1.5	W.S.W.	2.0	W.S.W.	1.5	W. by S.
	16	W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.5	N.W. by W.	0.2	W.N.W.	0.2	W. by N.
	17	W.	0.2	W.	0.2	W.	0.5	W. by S.	1.0	W. by S.	1.0	S.S.W.
	18	—	0.0	—	0.0	S.W.	0.2	—	0.0	W.S.W.	0.2	S.W.
	19	—	0.0	—	0.0	—	0.0	N. by E.	0.2	N. by E.	0.2	S.S.E.
	20	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	E.	0.2	E.
	21	—	—	—	—	—	—	—	—	—	—	—
	22	N.E.	0.5	N.E.	0.5	E. by N.	0.5	E. by N.	0.2	E.	0.2	E.
	23	—	0.0	S.E. by S.	0.2	—	0.0	E.S.E.	0.2	—	0.0	S.
	24	W.	0.2	W.N.W.	0.5	W.N.W.	1.0	W.N.W.	0.5	W.N.W.	0.5	W.
	25	W.N.W.	0.5	W.N.W.	0.5	W.S.W.	0.5	W.	2.0	W.	2.0	W.
	26	N.N.W.	0.5	N.N.W.	0.5	N.W.	1.0	N.W. by N.	1.0	N.	1.0	N. by W.
	27	N.W. by N.	1.5	N.N.W.	1.0	N.W. by N.	1.5	N.W. by N.	5.0	N.W. by N.	5.0	N.W. by N.
	28	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0.2	E.N.E.	0.2	N.E.	0.2	—	0.0	E.S.E.	0.2	E.S.E.
	30	E.N.E.	0.2	N.E.	0.2	E.N.E.	0.2	E.	1.0	E.N.E.	0.5	E.
	31	—	0.0	N.	0.5	N. by W.	1.0	N.	1.5	N. by W.	0.5	N. by W.
(continued.)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	W.N.W.	1.5	W.	1.0	W. by N.	0.5	W.	0.5	W.	0.5	W.N.W.
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	4	—	0.0	—	0.0	N.N.E.	0.2	—	0.0	—	0.0	N. by W.
	5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—
	6	E. by N.	1.5	E. by N.	1.5	E.	2.0	E. by N.	2.0	E.	2.0	E. by N.
	7	—	—	—	—	—	—	—	—	—	—	—
	8	N.	1.5	N.	0.5	N.	0.5	N.	0.2	N.	0.2	—
	9	E.	2.0	E.	2.5	E.	2.5	E.	2.5	E. by S.	2.0	E.N.E.
	10	W.	1.5	W.N.W.	0.5	N.W. by W.	1.5	N. by W.	2.0	N. by W.	1.5	N. by W.
	11	N.N.E.	0.2	N.N.E.	0.2	—	0.0	N. by W.	0.5	N. by W.	0.5	N. by W.
	12	S.W. by S.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.5	N.
	13	W.S.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	W.S.W.	1.5	W. by S.	0.2	W.	0.2	W. by S.	0.2	—	0.0	—
	16	N.W. by N.	2.0	W.N.W.	1.0	W.N.W.	1.5	W.N.W.	0.5	W. by N.	0.2	W.
	17	S.S.W.	1.5	S.W. by S.	0.5	S.W.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.
	18	N.W.	2.0	N.W. by W.	1.5	N.W. by W.	1.0	N.N.W.	0.2	N.N.W.	0.2	W.N.W.
	19	S.E. by E.	0.2	—	0.0	—	0.0	—	0.0	E. by N.	0.2	E. by N.
	20	—	0.0	—	0.0	—	0.0	N.N.W.	3.0	N.N.W.	3.0	N.N.W.
	21	—	—	—	—	—	—	—	—	—	—	—
	22	S.E. by S.	0.2	—	0.0	S. by E.	0.2	S. by E.	0.2	—	0.0	—
	23	W.	0.2	—	0.0	—	0.0	W.	1.0	W. by N.	1.0	W. by S.
	24	S. by W.	0.5	S.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.E. by S.
	25	W.N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—
	26	N.N.W.	3.0	N. by W.	3.0	N.	3.0	N. by W.	4.0	N. by W.	4.0	N. by W.
	27	N.W.	2.5	N.W. by W.	2.0	N.W. by W.	3.0	W.N.W.	2.5	W.N.W.	0.5	W.N.W.
	28	—	—	—	—	—	—	—	—	—	—	—
	29	N.	1.0	N. by E.	0.5	N.N.E.	0.2	N.E.	0.2	N.E.	0.2	E.N.E.
	30	E.S.E.	1.0	E.S.E.	1.5	E.S.E.	1.5	N.E.	1.5	N.E.	0.5	N.E. by N.
	31	N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—

DIRECTION AND FORCE OF THE WIND.



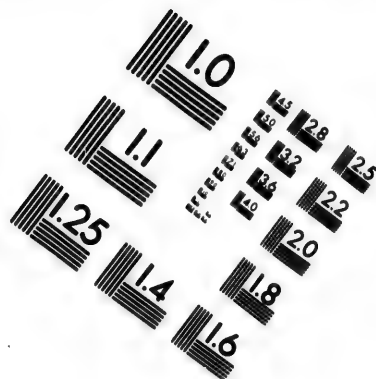
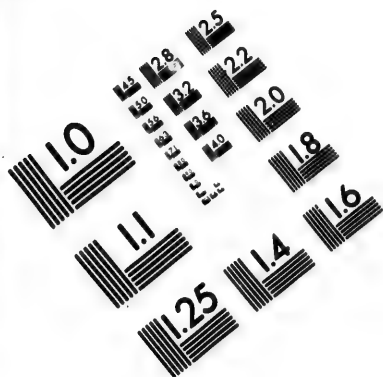
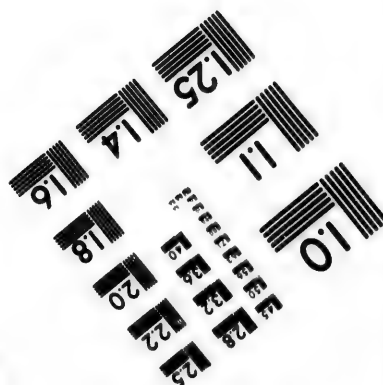
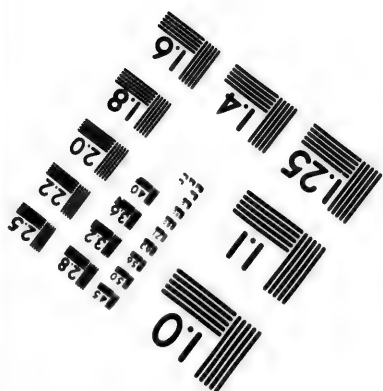
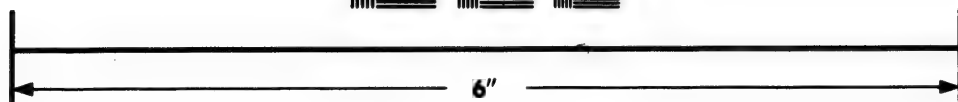
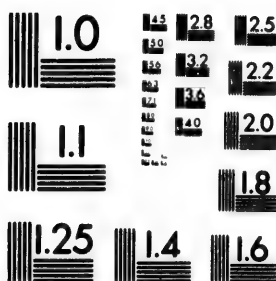


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01

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	E.S.E.	0'2	S.E.	0'2	S.S.E.	lbs. 0'2
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	—	0'0	S. by W.	0'2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0'0	—	0'0	N.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.	0'2
	6	E. by N.	1'0	E. by N.	0'5	E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2
	7	W.S.W.	0'2	W.	0'5	W.N.W.	1'5	N.W. by W.	1'0	N.W. by W.	2'0	W.N.W.	1'5
	8	E.	0'2	E.	0'2	E.	0'2	S.E.	0'2	—	0'0	—	0'0
	9	N.N.W.	0'2	N.N.W.	0'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'2	S.S.W.	0'2
	10	W.S.W.	0'2	W.N.W.	0'5	N.W. by W.	2'5	W.N.W.	3'0	W.N.W.	3'5	W.N.W.	3'5
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	E.	0'2	E.	0'2	W.N.W.	1'5	N.W. by W.	2'5	N.W. by W.	3'0	N.W.	3'5
	13	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S. by W.	0'2
	14	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'5	S. by W.	0'5
	15	N.W.	0'2	W.N.W.	0'5	N.W.	1'5	N.N.W.	1'5	N. by W.	0'5	N. by W.	1'0
	16	—	0'0	N.W. by W.	0'2	W. by N.	0'2	S.	0'2	S. by W.	0'5	S. by W.	1'5
	17	W. by N.	1'0	N.W.	1'0	N.W.	3'0	N.W. by W.	2'5	N.W.	2'0	W.N.W.	2'5
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	S.W.	0'2
	20	—	0'0	—	0'0	—	0'0	—	0'0	S.E.	0'2	S.E. by S.	0'2
	21	—	0'0	—	0'0	N.E. by E.	0'2	W. by N.	0'2	N.W.	1'0	W. by S.	1'0
	22	S.E.	0'2	S.E.	0'2	N.E. by N.	0'2	N.	0'2	N. by E.	0'2	N.	0'2
	23	N.E. by N.	0'2	N.E. by N.	1'0	N.E. by N.	1'0	N. by E.	0'5	N.N.E.	0'5	N. by E.	0'5
	24	N.N.E.	0'2	N.	0'2	N.	0'2	E.S.E.	0'2	S.E. by E.	0'2	S.E.	0'2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	S.S.W.	0'2
	27	—	0'0	N.W.	2'0	N.N.W.	3'0	N.N.W.	3'5	N.N.W.	3'0	N.N.W.	3'0
	28	—	0'0	—	0'0	W.N.W.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.E. by E.	0'2
	29	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	0'5	E.N.E.	0'2
	30	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.W.	1'0	N.W.	2'0	N.W.	1'5
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	E.	0'2	E.	0'2	E.S.E.	1'0	E.S.E.	1'5	E. by S.	1'5	E.S.E.	1'0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	E. by N.	0'2	E.	0'2	E.	0'2	E. by N.	1'0	E. by N.	1'0	E. by N.	1'5
	6	W.	4'5	W.	3'0	W.	0'5	W.	1'5	W. by S.	1'5	W. by S.	1'0
	7	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	—	0'0	—	0'0
	8	N. by W.	3'5	N. by W.	2'5	N.W. by N.	1'0	N.N.W.	1'0	N. by W.	1'5	N. by W.	1'5
	9	S.S.W.	1'5	S.W. by S.	0'5	S.W.	0'5	S.W.	0'2	S.W.	0'2	S.W.	0'2
	10	N.N.W.	1'0	N.W. by N.	1'0	N.N.W.	1'0	N.W.	0'2	—	0'0	—	0'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N.N.W.	2'5	N.W.	0'2	N.W.	0'2	—	0'0	—	0'0	—	0'0
	13	S.W. by S.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	14	E. by N.	0'2	E. by N.	0'2	N. by E.	0'2	N.N.W.	0'2	N. by W.	0'2	N.N.W.	0'2
	15	N.N.W.	1'0	N. by W.	1'0	N. by W.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2
	16	S.E. by S.	0'2	E.S.E.	0'2	E.	0'5	N.	0'2	—	0'0	—	0'0
	17	W.N.W.	2'0	W.N.W.	2'0	N.W.	2'5	N.W.	2'5	N.W.	3'5	N.W.	3'0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	S.S.W.	0'2	—	0'0	S.W.	0'2	—	0'0	—	0'0	—	0'0
	20	—	0'0	—	0'0	—	0'0	—	0'0	E. by S.	0'2	E. by S.	0'2
	21	W.S.W.	0'2	W.S.W.	0'2	W. by S.	0'2	N.	0'2	N.	0'2	S.S.E.	0'2
	22	N.E. by N.	0'2	N.E. by N.	0'2	N.E. by N.	0'2	N.N.E.	1'0	N.N.E.	1'0	N. by E.	0'5
	23	S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	S.W.	0'2
	27	N.N.W.	2'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2
	28	E.	0'2	E.	0'2	E.	1'5	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'5
	29	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	30	N.W. by W.	2'5	N.W. by N.	1'0	—	0'0	—	0'0	—	0'0	—	0'0

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MAY.	1	N.N.W.	0'2	N. by W.	0'2	N. by W.	0'2	S.	0'2	S.	0'5	S.	0'5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	W. by N.	0'2	W.S.W.	0'2	W.S.W.	1'5	W.	3'0	W.	3'0	W.	2'5
	4	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	S.	0'2
	5	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	—	0'0	—	0'0	—	0'0	W.	0'2	W.	0'2	E. by S.	0'2
	8	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'5	N.E. by E.	0'5	N.E.	0'5
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	0'0	E. by N.	1'0	E. by S.	0'5	E.	0'2
	11	—	0'0	—	0'0	—	0'0	S.E.	0'2	E.	0'2	E.	0'2
	12	S.E. by S.	0'2	—	0'0	S.E.	0'2	E.	0'2	E.	0'2	E.	0'2
	13	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.	0'2	E.	1'0	E.	1'0
	14	—	0'0	—	0'0	E. by N.	0'2	E. by N.	0'5	E.	0'5	E.S.E.	0'5
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	20	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'5	E. by S.	0'5
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2
	22	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	N.W.	0'2	N.W.	0'2	N.W.	0'2	—	0'0
	25	—	0'0	S.E.	0'2	S.E.	0'2	S.E.	0'2	—	0'0	E.	0'2
	26	W. by N.	0'2	W. by N.	0'2	W.N.W.	0'5	N.W. by W.	0'5	N.W. by W.	0'5	S. by W.	0'5
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	E.S.E.	0'2
	29	E. by N.	0'5	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E. by N.	2'5	E.N.E.	2'5	N.E. by E.	2'5	E.N.E.	3'0	E.N.E.	3'0	E.N.E.	2'5
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MAY.	1	—	0'0	—	0'0	—	0'0	E.	0'2	E.	0'2	E.N.E.	0'2
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	W. by N.	1'5	W.N.W.	1'0	W.N.W.	0'2	—	0'0	—	0'0	—	0'0
	4	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	—	0'0
	5	S.	0'5	S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	E. by N.	0'2	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	N. by W.	0'2
	8	N.	1'5	N.	2'0	N.	2'5	N. by E.	1'5	N. by E.	1'5	N. by E.	1'0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	S. by E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	12	E. by N.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	N.E.	0'2
	14	—	0'0	—	0'0	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0
	15	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	E.	0'2	E.	0'2	E.	0'5	—	0'0	—	0'0	—	0'0
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	—	0'0	W.N.W.	0'2	N.N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'5	N.W. by N.	0'2
	20	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	21	—	0'0	W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0	—	0'0
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	W.	0'2	W.	0'2	—	0'0	W. by S.	0'2	N.W. by W.	3'5	N.W.	3'5
	26	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0
	27	E.	0'2	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	28	E.S.E.	0'2	E.S.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N. by W.	0'5
	29	N.W. by N.	1'0	N.W.	1'5	N.N.W.	1'0	N. by W.	2'0	N.N.E.	0'5	N.N.E.	0'5
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E.N.E.	2'5	E.N.E.	1'5	E.N.E.	0'5	E.N.E.	0'5	E. by N.	0'5	E. by N.	0'5

DIRECTION AND FORCE OF THE WIND.																				
5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.					
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.						
lbs.		lbs.	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.							
0'5	S.	0'5	S.	0'5	S.E. by S.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	1					
3'0	W.	2'5	W.	2'5	W.N.W.	2'0	W.N.W.	2'5	W. by N.	3'0	W.N.W.	2'5	W.N.W.	2'5	2					
0'2	S.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.	0'2	S. by W.	0'2	S. by W.	0'2	3					
0'2	S.S.W.	0'2	S. by E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S. by E.	0'5	4					
0'0	—	0'0	S.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	—	0'0	5					
0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'2	6					
0'5	N.E.	0'5	N.E.	0'2	E.N.E.	0'2	N.N.E.	0'2	N.E.	0'2	N.	0'2	N. by W.	2'0	7					
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8					
0'5	E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	9					
0'2	E.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	10					
0'2	E.	0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'5	N.E. by E.	0'5	E.N.E.	1'0	E.	1'0	11					
1'0	E.	1'0	E.	1'0	E. by S.	0'5	E. by S.	0'5	E. by S.	0'2	—	0'0	—	0'0	12					
0'5	E.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'2	—	0'0	—	0'0	13					
0'0	—	0'0	E.	0'2	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	14					
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15					
0'0	—	0'0	E. by N.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2	16					
0'0	—	0'0	—	0'0	—	0'0	E. by S.	0'2	E.S.E.	0'2	—	0'0	—	0'0	17					
0'0	—	0'0	E. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18					
0'5	E. by S.	0'5	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	19					
0'0	E.	0'2	—	0'0	E.	0'2	E.	0'2	E.	0'2	E. by N.	0'2	—	0'0	20					
0'2	S.W.	0'2	S. by W.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S. by W.	0'2	21					
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22					
0'2	—	0'0	—	0'0	—	0'0	W.S.W.	0'2	W.S.W.	0'2	—	0'0	—	0'0	23					
0'0	E.	0'2	E.	0'2	E.	0'2	E.	0'2	S. by W.	0'5	S.S.E.	0'2	S.S.E.	0'2	24					
0'5	S. by W.	0'5	S. by E.	0'5	S. by E.	0'5	S. by E.	0'5	S. by E.	0'5	S. by E.	0'2	S.S.E.	0'2	25					
0'0	—	0'0	E.S.E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	26					
0'2	E.S.E.	0'2	S.E. by E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	27					
0'2	E.N.E.	0'2	—	0'0	N.E. by E.	0'2	N.E. by E.	0'2	—	0'0	N. by W.	0'2	N. by W.	0'5	28					
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29					
3'0	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	30					
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31					

MAY.

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.			
17 ^h .		18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .			23 ^h .		
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0'2	E.N.E.	0'2	—	—	—	—	—	—	—	—	—	—	—	1	
—	—	—	W. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	W. by S.	0'2	2
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	—	0'0	—	0'0	4
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
0'2	N. by W.	0'2	N. by W.	0'2	N.N.E.	0'2	N.E. by N.	0'2	N.E.	0'2	N.E.	1'0	S.W.	1'5	7
1'5	N. by E.	1'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
—	—	—	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
0'2	N.E.	0'2	N.E. by N.	0'2	N.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.E. by E.	0'2	13
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
0'5	N.W. by N.	0'2	N.W. by N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	0'0	19
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20
0'0	—	0'0	—	0'0	S.S.E.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	21
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
3'5	N.W.	3'5	W.N.W.	2'5	W.N.W.	3'0	W.N.W.	1'5	W.N.W.	1'0	W.N.W.	0'5	W.N.W.	0'2	24
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
0'2	N. by W.	0'5	E. by N.	0'5	E. by N.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	27
0'5	N.N.E.	0'5	—	0'2	E.	0'5	E. by N.	1'0	E. by N.	1'0	E. by N.	1'0	E. by N.	2'0	28
0'5	E. by N.	0'5	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	—	0'0	29
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30
0'5	E. by N.	0'5	—	—	—	—	—	—	—	—	—	—	—	—	31

MAY.

MAY.

MAY.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	S.S.E.	0'2	S. by E.	0'2
	2	—	0'0	—	0'0	W.N.W.	0'2	W.N.W.	0'2	—	0'0	N.W.	0'2
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	4	N.W.	0'2	—	0'0	N.W.	0'2	W.	1'5	W.N.W.	0'5	W.	0'5
	5	W.	0'2	W.N.W.	0'2	N.W. by W.	0'5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.S.W.	0'2	S.S.E.	0'2
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'2
	10	S.S.W.	0'2	S.S.W.	0'2	—	0'0	S.W. by S.	0'2	S.	0'2	S.S.W.	0'5
	11	S.	0'2	S.	0'2	S. by W.	0'2	S. by W.	0'5	S.	0'5	S.	0'5
	12	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S. by W.	0'5
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	—	0'0	W.N.W.	2'5	W.N.W.	2'5	W.	2'0	W.	2'5	W. by N.	2'5
	15	W. by N.	1'0	W.N.W.	1'0	W.N.W.	1'5	W.N.W.	3'0	W.N.W.	2'0	W.N.W.	2'5
	16	N.W.	0'2	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	N.W.	0'2	W.N.W.	0'5
	17	—	0'0	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2
	18	—	0'0	E.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2
	19	—	0'0	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	1'0
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	S.W. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W. by S.	0'2
	22	—	0'0	E.N.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	S.E. by E.	0'2
	23	—	0'0	—	0'0	N.W.	0'2	N.W. by N.	0'2	S.S.W.	0'2	S.S.W.	0'2
	24	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.W.	0'2	S.W.	0'2
	25	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.S.E.	0'2
	26	W. by N.	0'2	W. by N.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	0'0	—	0'0	N.N.W.	0'2	N.W.	0'5	N.W. by N.	0'5	N.W. by N.	0'2
	29	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	30	N.	0'2	N.	0'2	N.	0'2	W.	0'2	E. by S.	0'2	E.S.E.	0'2
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	W.	lbs. 0'2	W.	lbs. 0'2	W.	lbs. 0'2	—	lbs. 0'0	—	lbs. 0'0	N.W.	0'5
	2	S.	0'2	S.	0'2	S.	0'2	—	0'0	—	0'0	—	0'0
	3	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	4	W.	1'0	W. by S.	0'5	W.	0'2	—	0'0	—	0'0	—	0'0
	5	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	0'0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	8	—	0'0	—	0'0	E.N.E.	0'2	—	0'0	—	0'0	N.E.	0'2
	9	S.W. by S.	1'5	S.W. by S.	1'0	—	0'0	—	0'0	—	0'0	—	0'0
	10	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	—	0'0
	11	W.	2'0	W.	1'5	W.	1'0	W.	1'0	W.	1'0	W.	1'0
	12	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	—	0'0	—	0'0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	W.N.W.	3'0	W.N.W.	3'0	W. by N.	2'0	W.N.W.	2'0	W.N.W.	1'5	W.N.W.	1'5
	15	N.W. by W.	0'5	W. by N.	0'5	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0
	19	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	S. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	26	S.W.	0'5	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	N. by W.	0'2	N. by W.	0'2	N.N.W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2
	29	N.N.W.	0'5	N.N.W.	0'2	—	0'0	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2
	30	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0

DIRECTION AND FORCE OF THE WIND.															
5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	1
0'0	N.W.	0'2	—	0'0	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	2
0'0	—	0'0	S.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	E.	0'2	3
0'5	W.	0'5	W.	1'5	W.	2'5	W.	2'5	W.N.W.	2'5	W.N.W.	2'5	W.	1'5	4
0'5	W. by N.	0'5	E.S.E.	0'2	S. by E.	0'2	S.	0'5	S.	0'2	N.E. by N.	0'5	N.W. by N.	0'5	5
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	S.E.	0'2	E.S.E.	0'2	7
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
0'0	E. by N.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.	0'2	S.S.W.	1'0	S.W. by S.	1'0	9
0'2	S.S.W.	0'5	S. by W.	0'2	S.S.W.	0'5	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	10
0'5	S.	0'5	S.W.	1'0	S.W. by S.	0'5	W.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by W.	1'0	11
0'2	S. by W.	0'5	S.	0'2	S.	0'2	S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	12
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13
2'5	W. by N.	2'5	W.N.W.	3'5	W.N.W.	3'5	N.W. by W.	3'0	W.N.W.	3'5	W.N.W.	5'0	N.W.	4'2	14
2'0	W.N.W.	2'5	W.N.W.	2'0	W.	1'5	W. by N.	1'5	W.N.W.	1'5	W.N.W.	1'0	N.W.	1'0	15
0'2	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.W. by N.	0'5	N.W. by W.	0'5	N.W.	0'5	N.W.	0'2	16
0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	17
0'2	E.	0'2	E. by S.	0'2	E.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'2	18
0'2	S.S.W.	1'0	S.W.	1'0	N.N.W.	2'5	N.N.W.	1'0	N. by W.	0'2	N.N.W.	0'2	S.S.W.	0'2	19
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20
0'2	S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	—	0'0	21
0'0	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	S.E.	0'2	S.S.W.	0'2	S. by W.	0'2	22
0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	23
0'2	S.W.	0'2	S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	24
0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	—	0'0	E.	0'2	25
0'2	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	1'0	26
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27
0'5	N.W. by N.	0'2	N.W. by W.	0'2	W. by N.	0'2	N. by W.	0'2	N.	0'5	N.	0'5	N. by W.	0'2	28
0'0	—	0'0	N.	0'2	N.N.W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	29
0'2	E.S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	30

JUNE.

DIRECTION AND FORCE OF THE WIND.															
17 ^h .			18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0'0	N.W.	0'5	N.W.	0'5	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	1
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
—	—	—	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7
0'0	N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
0'0	—	0'0	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	10
1'0	W.	1'0	W.	0'5	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	2'0	W.N.W.	1'0	—	0'0	11
0'0	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	12
—	—	—	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
1'5	W.N.W.	1'5	W.	1'0	W.	1'5	W.	1'5	W.	1'5	W.	1'5	W. by N.	1'0	14
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	W. by N.	0'2	15
0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	16
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
0'0	—	—	N.W. by W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	—	0'0	—	0'0	20
0'0	S.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
0'0	—	0'0	—	0'0	—	0'0	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	23
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26
—	—	—	—	0'0	N.W.	0'2	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	27
0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	28
0'2	N.N.W.	0'2	N.N.W.	0'5	N. by W.	0'5	N. by W.	0'5	N.	0'5	N.	0'5	N.	0'2	29
0'0	—	0'0	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	—	0'0	30

JUNE.

JUNE.

JUNE.

DIRECTION AND FORCE OF THE WIND.

		S.	
	Force.	Direction.	Force.
	lbs.		lbs.
	0'2	E.S.E.	0'2
	0'2	E.S.E.	0'2
	0'0	—	0'0
	—	—	—
	0'2	S. by E.	0'2
	0'0	—	0'0
	0'2	S. by W.	0'2
	0'2	S. by E.	0'2
	0'2	E.S.E.	0'2
	0'0	—	0'0
	—	—	—
	0'2	S. by E.	0'2
	0'2	N.N.W.	0'5
	0'2	S.E. by S.	0'2
	0'0	S.	0'2
	0'2	S. by W.	0'2
	1'0	S.S.W.	1'5
	—	—	—
	0'2	S.	0'2
	0'2	S.S.W.	0'2
	0'2	S.S.W.	0'2
	0'5	N.N.W.	0'5
	0'5	S. by E.	0'2
	0'2	E.S.E.	0'2
	—	—	—
	2'0	N.N.W.	1'5
	0'2	S.E. by S.	0'2
	0'2	S.E.	0'2
	0'2	S.S.E.	0'2
	0'2	—	0'0
	0'2	S.S.E.	0'2

6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	—	0.0	1
E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	—	0.0	—	—	0.0	2
—	0.0	S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	0.2	3
—	—	—	—	—	—	—	—	—	—	—	—	—	4
S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	E.	1.0	N. by W.	0.2	0.2	5
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	0.0	6
S. by W.	0.2	S. by W.	0.2	—	0.0	—	0.0	—	0.0	—	—	0.0	7
S.E. by E.	0.2	S.E. by E.	0.2	E.S.E.	0.2	E.	0.2	E.	0.2	—	—	0.0	8
E.S.E.	0.2	S.E. by E.	0.2	E.	0.2	E. by S.	0.2	E. by S.	0.2	—	—	0.0	9
E. by N.	0.2	—	0.0	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	—	—	0.0	10
—	—	—	—	—	—	—	—	—	—	—	—	—	11
S.	0.2	—	—	S.	0.2	S.	0.2	S.	0.2	—	—	0.0	12
N.N.W.	0.5	N.N.W.	1.5	N. by W.	1.5	N. by W.	2.0	N. by W.	1.5	N.N.W.	1.5	1.0	13
S.S.E.	0.2	S.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.5	S.	0.2	0.2	14
—	0.2	S.	0.2	S.S.E.	0.5	S.	1.0	S.	0.5	S.	0.5	0.5	15
S.	0.2	S.	0.5	S. by W.	2.0	S. by W.	2.0	S. by W.	1.5	S.S.W.	0.5	0.5	16
S.S.W.	1.5	S.S.W.	2.5	S.S.W.	1.5	S.W.	3.0	S.W.	0.2	—	—	0.0	17
—	—	—	—	—	—	—	—	—	—	—	—	—	18
S.	0.5	S.	1.0	S.S.W.	0.5	S.S.W.	0.2	S.W.	0.2	S.S.W.	0.2	0.2	19
S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	N.E.	0.5	0.5	20
S. by W.	0.2	S.	0.5	S.	0.2	S.W. by S.	0.2	S.W.	0.5	—	—	0.0	21
N.W.	0.5	N.W.	1.5	N.W.	1.0	N.W.	0.5	N.N.W.	0.5	N.N.W.	1.0	0.2	22
S. by E.	0.2	S.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	—	0.0	23
E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.N.E.	0.2	0.2	24
—	—	—	—	—	—	—	—	—	—	—	—	—	25
N.	1.5	N.	1.0	N.	0.5	N.	1.0	N. by E.	1.5	N. by E.	1.0	1.0	26
S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	0.2	27
E. by S.	0.2	E.S.E.	0.2	E. by N.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	0.2	28
S.E. by S.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	S.E.	0.2	S.E. by S.	0.2	0.2	29
S.E.	0.2	S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	E.S.E.	0.2	S.E. by S.	0.5	0.5	30
S. by E.	0.2	W.	0.2	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	W.	0.5	0.5	31

JULY.

20h.	21h.	2
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15 ^h .		17 ^h .	
Force.	Direction.	Force.	Direction.
lbs.		lbs.	
0'2	E.N.E.	0'2	
0'2	—	0'0	
0'0	—	0'0	
—	—	—	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
—	—	—	
0'0	—	0'0	
0'2	N.N.W.	0'2	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
—	—	—	
0'2	S.W.	0'2	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'2	—	0'0	
—	—	—	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	
0'0	—	0'0	

[illegible]

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
AUGUST.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W.	0'2
	3	—	0'0	—	0'0	—	0'0	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2
	4	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2
	5	E. by S.	0'2	—	0'0	—	0'0	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2
	6	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.	0'2	E.	0'2	E.S.E.	0'2
	7	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	E.	0'2	E.	0'2
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	E.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'2	E.	0'2	E. by S.	0'2
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	12	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13	—	0'0	—	0'0	—	0'0	S.	0'2	S.S.E.	0'2	S.S.E.	0'2
	14	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	W.S.W.	0'2	S.S.W.	0'2
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	—	0'0	W.N.W.	0'2	N.W.	1'0	N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0
	19	—	0'0	—	0'0	N.W.	0'2	W.N.W.	0'5	N.W. by W.	1'5	N.W. by W.	1'0
	20	W. by N.	0'2	W. by N.	0'2	W. by N.	0'2	W.S.W.	0'2	S.W. by W.	0'5	S.W. by W.	0'5
	21	N.W. by W.	0'2	W.N.W.	0'5	W.N.W.	0'2	W.N.W.	0'2	W. by N.	0'5	N.W.	2'0
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	N.N.W.	0'2	W. by N.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2
	26	—	0'0	—	0'0	—	0'0	E.	0'2	S.S.E.	0'2	S. by W.	0'5
	27	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.N.W.	0'5	N.N.W.	0'5
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	0'0	E.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by W.	0'5	S.S.W.	1'0
	31	—	0'0	—	0'0	N.W. by N.	0'2	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2

(continued)

Mean Göttingen Time.		12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
AUGUST.	1	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.
	2	S.	0'2	S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	4	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	—	0'0
	5	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	E.N.E.	0'2
	6	N.	1'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N.	0'2
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	10	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	12	S.S.W.	0'2	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	13	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	—	0'0
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	17	—	0'0	—	0'0	—	0'0	N.W. by N.	1'5	N.N.W.	0'5	N.N.W.	0'2
	18	N.W. by W.	1'0	N.W. by W.	0'5	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	—	0'0
	19	W. by N.	1'0	W. by N.	0'2	—	0'0	—	0'0	W.	0'2	W. by N.	0'2
	20	W.N.W.	0'2	W. by N.	0'2	W.	0'2	N.W.	0'2	W. by N.	0'2	—	0'0
	21	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	—	0'0	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	26	S.S.W.	1'0	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	1'0
	27	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	W.N.W.	0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	31	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0

5 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0'0	S.W.	0'2
0'2	S.S.E.	0'2
0'2	S. by E.	0'2
0'2	E. by S.	0'2
0'2	E.S.E.	0'2
0'2	E.	0'2
—	—	—
0'2	E. by S.	0'2
0'0	E.S.E.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	S.S.E.	0'2
0'2	S.W. by S.	0'2
—	—	—
0'2	S.S.W.	0'2
0'0	—	0'0
1'0	W.N.W.	1'0
1'5	N.W. by W.	1'0
0'5	S.W. by W.	0'5
0'5	N.W.	2'0
—	—	—
0'2	E.S.E.	0'2
0'0	—	0'0
0'0	E.S.E.	0'2
0'2	S. by W.	0'5
0'5	N.N.W.	0'5
0'0	—	0'0
—	—	—
0'5	S.S.W.	1'0
0'2	N.N.W.	0'2

6 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	E.N.E.	0'2
0'2	N.	0'2
0'0	—	0'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	N.N.W.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	W. by N.	0'2
0'0	—	0'0
—	—	—
0'2	E.N.E.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	S.S.W.	1'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0

DIRECTION AND FORCE OF THE WIND.													Mean Göttingen Time.
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .			
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
—	—	—	—	—	—	—	—	—	—	—	—	1	
S.W. by S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	2	
S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.	0'2	3	
S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.S.E.	0'2	4	
E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	5	
S.S.E.	0'2	—	0'0	S.S.E.	0'2	—	0'0	—	0'0	N.W.	0'2	6	
S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	—	0'0	7	
—	—	—	—	—	—	—	—	—	—	—	—	8	
E.	0'2	E. by N.	0'2	E.S.E.	0'2	E.	0'2	E.	0'2	E.	0'2	9	
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	S.E. by S.	0'2	10	
—	0'0	—	0'0	—	0'0	W.N.W.	0'2	S.W.	0'2	—	0'0	11	
—	0'0	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	12	
S.E.	0'2	E. by S.	0'2	S.E. by E.	0'5	E. by S.	0'5	E. by S.	0'5	E. by S.	0'2	13	
—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	14	
—	—	—	—	—	—	—	—	—	—	—	—	15	
S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	—	0'0	16	
S.S.W.	0'2	S.S.W.	2'0	S.W. by W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	17	
N.W. by W.	1'0	N.W.	1'0	N.W.	2'0	N.W.	2'0	N.W.	3'0	N.W. by W.	2'0	18	
N.W. by W.	1'0	W.N.W.	1'0	W. by S.	1'5	W.N.W.	1'5	W.N.W.	2'0	W. by N.	1'5	19	
S.W.	2'0	W.	2'0	W.	2'0	N.W. by W.	2'0	N.W. by W.	0'2	N.W.	0'5	20	
W.N.W.	2'0	N.W. by N.	1'5	N.N.W.	1'0	N.N.W.	1'0	W.N.W.	1'0	W.N.W.	0'5	21	
—	—	—	—	—	—	—	—	—	—	—	—	22	
E.S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	23	
—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	—	0'0	24	
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'5	E. by S.	0'5	E. by S.	0'2	—	0'0	25	
S. by E.	0'5	S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	0'5	S.	1'0	26	
N.	0'5	N.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	27	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28	
—	—	—	—	—	—	—	—	—	—	—	—	29	
S. by W.	1'0	S. by W.	1'0	S. by W.	1'0	S.S.W.	1'0	S.W. by S.	1'0	W.N.W.	0'5	30	
N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	31	

AUGUST.

18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
—	—	—	—	—	—	—	—	—	—	—	—	1
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by S.	0'2	4
N.E. by E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'5	N.E.	0'2	—	0'0	5
N.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	6
—	—	—	—	—	—	—	—	—	—	—	—	7
E.	0'5	E.	0'5	E.	1'0	E.	0'5	E. by N.	1'0	E. by N.	0'5	8
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
—	—	—	—	—	—	—	—	—	—	—	—	14
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
N.W. by N.	0'2	N.W.	0'2	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N.W.	0'2	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	19
—	0'0	—	0'0	—	0'0	W. by N.	0'2	W. by N.	0'2	N.W. by W.	0'2	20
—	—	—	—	—	—	—	—	—	—	—	—	21
N.N.E.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	22
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
W.S.W.	0'2	—	0'0	—	0'0	—	0'0	W.N.W.	0'5	N.W.	0'5	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	—	—	—	—	—	—	—	—	—	—	—	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	30
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	31

AUGUST.

AUGUST.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
SEPTEMBER.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	E. by S.	0'2	E.S.E.	0'2	S.S.E.	0'2
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2
	3	—	0'0	S. by E.	0'2	S. by E.	0'2	—	0'0	S.S.W.	0'2	S.S.W.	0'2
	4	—	0'0	—	0'0	N. by E.	0'2	E.N.E.	0'5	E. by N.	0'5	E.	1'0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.S.W.	0'5	S. by W.	0'5
	7	—	0'0	—	0'0	E. by S.	0'5	E. by N.	0'5	E. by N.	0'5	E.N.E.	1'0
	8	E.	0'2	E. by S.	0'2	E. by S.	0'2	S.E.	0'2	S.	0'5	S.	1'0
	9	N.W. by W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.	0'2	N.N.W.	0'2	N.W.	0'2
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.S.E.	0'2
	11	—	—	—	0'0	—	0'0	S.	0'5	E.	0'5	E.	0'5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N.W.	0'2	N.W.	0'5	N.W.	1'0	W.N.W.	1'5	N.W. by W.	1'5	N.W.	2'0
	14	N.W. by N.	0'2	N.W. by N.	0'2	N.W. by N.	0'5	N.W. by N.	1'0	N.W. by N.	1'5	N.W. by N.	2'0
	15	—	0'0	N.W.	0'2	N.W.	0'2	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2
	16	—	0'0	—	0'0	N.N.W.	0'2	N.N.W.	0'2	S.	0'2	S.S.E.	0'2
	17	—	0'0	E.N.E.	0'2	E. by N.	0'2	E. by N.	0'5	E.	0'5	E.	0'5
	18	N.E.	0'5	N.E. by E.	0'5	N.E.	0'5	N.E. by E.	0'5	E.N.E.	0'5	E.N.E.	0'2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	N.E.	0'2	N. by E.	0'2
	21	N.N.W.	0'2	N.W. by N.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N.W. by N.	0'2
	22	N. by E.	0'2	N. by E.	0'2	N. by E.	0'2	W. by N.	0'2	S.S.W.	0'5	S.	0'5
	23	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2
	24	N.E. by E.	0'5	E.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'5
	25	N.N.E.	0'5	N. by E.	0'5	N.E. by E.	0'2	N.N.E.	0'2	N.E. by N.	0'2	N.E. by E.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	S.S.W.	0'2	N. by E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	S. by E.	0'2
	28	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.N.W.	0'2	W.N.W.	0'5	W. by N.	0'5
	29	W.	0'2	W. by S.	0'2	W.	0'5	W.S.W.	0'5	S.W.	0'5	W.	0'5
	30	W.N.W.	0'2	W.N.W.	0'2	W. by N.	0'2	W.	0'2	W.N.W.	0'5	W. by N.	0'5

(continued)

Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
SEPTEMBER.	1	—	lbs.	0'0	—	lbs.	0'0	—	lbs.	0'0	—	lbs.	0'0
	2	—	0'0	—	0'0	S. by E.	0'2	—	0'0	—	0'0	—	0'0
	3	N. by W.	2'5	N.N.W.	1'5	N.N.W.	0'5	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2
	4	E. by S.	1'0	E. by N.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	E. by N.	0'5	E. by N.	0'5	E.N.E.	0'5	—	0'0	—	0'0	—	0'0
	8	S.W. by W.	1'0	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'5	N.W.	1'5	N.N.W.	2'5
	9	S. by W.	0'5	S. by W.	1'0	S.W. by S.	0'5	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0
	10	—	0'0	—	0'0	N.E. by N.	0'2	—	0'0	—	0'0	—	0'0
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N.W.	1'5	N.W.	1'5	N.W.	1'5	N. by W.	0'5	N. by W.	0'2	N.W. by W.	0'2
	14	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'5
	15	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2
	16	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'2
	17	E.N.E.	0'5	W.N.W.	0'2	W.N.W.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	1'0
	18	E.N.E.	0'5	E.	1'0	E. by N.	0'5	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'5
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	N.E.	0'2	—	0'0	N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2
	21	N.	0'5	N.	0'2	N.	0'2	N.	0'2	N. by W.	0'2	N. by W.	0'2
	22	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	N.E.	0'2	N.E. by N.	0'2	N.E. by N.	0'2
	25	E. by N.	0'2	E. by N.	0'2	E.N.E.	0'2	E. by N.	0'2	E. by N.	0'2	E. by S.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	0'0	—	0'0	W. by N.	0'5	N.W.	1'0	N.W. by W.	1'5	W.N.W.	0'5
	28	W.	0'5	W.	0'5	W.	0'5	W.	0'2	—	0'0	—	0'0
	29	W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	N.W. by W.	0'2
	30	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.						
6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			
Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	
S.S.E.	0'2	0'2	S. by E.	0'2	0'2	N. by E.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	—	—	0'0	1
S. by E.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	—	—	0'0	2
S.S.W.	0'2	0'2	S.S.W.	0'5	0'5	S.S.W.	0'2	0'2	S.W. by S.	0'2	0'2	N.W. by W.	2'0	2'0	N.N.W.	2'0	2'0	3
E.	1'0	1'0	E.	0'5	0'5	E. by N.	0'5	0'5	E. by N.	0'5	0'5	E. by S.	0'5	0'5	E. by S.	1'0	1'0	4
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
S. by W.	0'2	0'2	S.	0'2	0'2	S.	0'2	0'2	S.E. by E.	0'2	0'2	S.E. by E.	0'2	0'2	S.E. by E.	0'2	0'2	6
E. by N.	1'0	1'0	E.N.E.	1'0	1'0	N.E. by E.	1'0	1'0	E.N.E.	2'0	2'0	E.N.E.	1'0	1'0	E.N.E.	1'0	1'0	7
S. by E.	1'0	1'0	S.	1'0	1'0	S.	0'5	0'5	S.	0'5	0'5	S. by W.	0'2	0'2	S. by W.	2'0	2'0	8
W.S.W.	0'2	0'2	S.S.E.	0'5	0'5	S. by E.	0'5	0'5	S.	0'5	0'5	S.E. by S.	0'2	0'2	—	—	0'0	9
S.S.E.	0'2	0'2	S.S.E.	0'2	0'2	S.E. by S.	0'2	0'2	S.S.E.	0'2	0'2	—	—	0'0	—	—	0'0	10
E.	0'5	0'5	E.	0'5	0'5	E.	0'5	0'5	E.	0'5	0'5	E.	0'5	0'5	E.	0'5	0'5	11
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12
N.W. by W.	1'5	1'5	W.N.W.	1'5	1'5	N.W. by W.	1'5	1'5	N.W.	1'0	1'0	N.W. by W.	2'0	2'0	N.W.	2'0	2'0	13
N.W.	1'5	1'5	N.W.	1'5	1'5	W.N.W.	1'5	1'5	W.N.W.	1'5	1'5	N.W.	1'5	1'5	N.W. by N.	1'0	1'0	14
N.W. by N.	2'0	2'0	W. by S.	0'5	0'5	S. by W.	0'2	0'2	S. by W.	0'2	0'2	S. by W.	0'5	0'5	—	—	0'0	15
W.N.W.	0'2	0'2	S.	0'2	0'2	S.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	—	—	0'0	16
S.S.E.	0'2	0'2	S.	0'2	0'2	S.	0'2	0'2	S. by E.	0'2	0'2	S. by E.	0'2	0'2	—	—	0'0	17
E.	0'5	0'5	E.N.E.	0'2	0'2	E. by N.	0'2	0'2	E.N.E.	1'0	1'0	E.N.E.	1'0	1'0	E.N.E.	1'0	1'0	18
E.N.E.	0'2	0'2	E. by N.	0'2	0'2	N.E.	0'2	0'2	N.E. by E.	0'2	0'2	E.N.E.	1'0	1'0	E.N.E.	1'0	1'0	19
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20
N.N.E.	0'2	0'2	N.E. by N.	0'2	0'2	N.N.E.	0'2	0'2	N.E. by N.	0'2	0'2	N.E. by N.	0'2	0'2	N.E.	0'2	0'2	21
N.	0'5	0'5	N.N.W.	0'5	0'5	N.W. by W.	0'5	0'5	N.W. by W.	0'5	0'5	N.N.W.	0'5	0'5	N.N.W.	0'5	0'5	22
S. by W.	0'5	0'5	S. by W.	0'5	0'5	S. by W.	0'5	0'5	S. by W.	1'0	1'0	S.S.W.	0'5	0'5	—	—	0'0	23
S.W. by S.	0'2	0'2	S.S.W.	0'2	0'2	S. by W.	0'2	0'2	S. by W.	0'2	0'2	S. by W.	0'2	0'2	S. by W.	0'2	0'2	24
E. by N.	0'5	0'5	E.S.E.	0'5	0'5	E.	0'5	0'5	E.S.E.	0'2	0'2	E.	0'2	0'2	E. by N.	0'2	0'2	25
E.N.E.	0'2	0'2	E. by S.	0'2	0'2	E. by N.	0'2	0'2	E.	0'2	0'2	E.	0'2	0'2	E. by N.	0'2	0'2	26
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27
S.S.E.	0'2	0'2	N.E. by E.	0'2	0'2	S.S.W.	0'2	0'2	S.W.	0'2	0'2	S.W. by S.	0'2	0'2	—	—	0'0	28
N.W.	0'5	0'5	N.W. by W.	0'2	0'2	N.W. by N.	1'0	1'0	N.W. by N.	1'0	1'0	N.W. by W.	1'0	1'0	W.N.W.	1'0	1'0	29
W. by S.	0'5	0'5	S.W. by S.	1'0	1'0	N.W. by N.	1'0	1'0	W.	1'0	1'0	N.W. by W.	0'2	0'2	W.	0'2	0'2	30
W.S.W.	1'0	1'0	W.	0'5	0'5	S.W. by W.	0'5	0'5	W.N.W.	0'2	0'2	W.	0'2	0'2	W. by S.	0'2	0'2	

18 ^h .												Mean Göttingen Time.
Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	1
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	2
N.N.W.	0'2	0'2	N.	0'2	0'2	N.	0'2	0'2	N.N.E.	0'2	0'2	3
—	—	—	—	—	—	—	—	—	—	—	—	4
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	5
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	6
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	7
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	8
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	9
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	10
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	11
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	12
N.W.	0'2	0'2	N.W. by N.	0'5	0'5	N.W. by N.	0'5	0'5	N.W. by N.	0'5	0'5	13
—	0'0	0'0	N.W.	0'2	0'2	N.W.	0'2	0'2	—	0'0	0'0	14
N.N.W.	0'2	0'2	—	0'0	0'0	—	0'0	0'0	N.	0'2	0'2	15
E. by N.	0'2	0'2	E. by N.	0'2	0'2	—	0'0	0'0	—	0'0	0'0	16
E.N.E.	2'0	2'0	E.N.E.	0'5	0'5	E.N.E.	1'0	1'0	E.N.E.	0'2	0'2	17
—	—	—	—	—	—	—	—	—	—	—	—	18
E. by N.	0'5	0'5	E.	0'5	0'5	E. by N.	0'5	0'5	E. by N.	0'2	0'2	19
N.N.W.	0'2	0'2	N.N.W.	0'2	0'2	N.W. by W.	0'2	0'2	N.N.W.	0'5	0'5	20
N.N.W.	0'2	0'2	N. by W.	0'2	0'2	N.N.W.	0'2	0'2	N.	0'2	0'2	21
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	22
E.	0'5	0'5	E.	0'2	0'2	E. by N.	0'5	0'5	E. by N.	1'0	1'0	23
—	—	—	—	—	—	—	0'0	0'0	N.E. by N.	0'5	0'5	24
E.	1'0	1'0	E.S.E.	0'5	0'5	E.S.E.	0'5	0'5	E. by S.	0'5	0'5	25
W.N.W.	1'0	1'0	W.	0'2	0'2	W.S.W.	0'2	0'2	W.S.W.	0'2	0'2	26
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	27
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	28
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	29
—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	—	0'0	0'0	30

[illegible]

(continued)

Mean Göttingen Time.	12 ^h .			13 ^h .			14 ^h .			15 ^h .			16 ^h .			17 ^h .		
	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.	Direction.	Force.	lbs.
1	—	0'0	—	—	0'0	—	—	0'0	—	—	0'0	—	—	0'0	—	N. by E.	0'1	—
2	—	0'0	—	—	0'0	—	—	0'0	N. by W.	0'1	—	—	—	0'0	—	N.	0'0	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	0'0	—	—	0'0	—	—	0'0	—	—	0'0	—	—	0'0	—	—	—	0'0
5	—	—	—	E.S.E.	0'1	E.	0'1	E. by N.	0'2	E.N.E.	0'3	E. by N.	0'3	—	—	—	—	—
6	E. by N.	0'6	E.	0'3	E.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'4	—	—	—	—
7	E.	0'4	E. by N.	0'5	E.	0'1	E.	0'2	E. by S.	0'4	E. by N.	0'2	—	—	—	—	—	—
8	N.N.W.	0'2	N.W. by N.	0'4	N.N.W.	0'8	N.	0'8	N. by W.	0'6	N.N.W.	0'5	—	—	—	—	—	—
9	—	0'0	—	—	0'0	—	N.W.	0'3	N.W. by W.	0'1	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	—	0'0	—	—	0'0	N. by W.	0'1	—	0'0	—	—	0'0	—	—	0'0	—	—	0'0
12	—	0'0	—	—	0'0	N. by W.	0'1	—	0'0	—	—	0'0	—	—	0'0	S.W. by W.	0'1	—
13	W.N.W.	0'2	W. by N.	0'2	W. by N.	0'2	W.	0'1	—	—	—	0'0	—	—	—	W.	0'1	—
14	N.W.	0'4	N.N.W.	0'7	N.	0'2	N.W. by N.	0'1	—	—	—	0'0	—	—	—	—	—	0'0
15	—	0'0	S.S.E.	0'1	S. by W.	0'2	S.W. by S.	0'1	S.	0'1	S. by E.	0'1	—	—	—	—	—	—
16	S.E. by E.	0'1	S.E.	0'1	S.E. by E.	0'1	S.E. by S.	0'1	S.S.W.	0'3	S.W. by S.	0'1	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	S.W. by S.	0'1	S. by W.	0'2	S.W. by S.	0'2	—	0'0	N.W.	0'8	W.N.W.	0'3	—	—	—	—	—	—
19	—	0'0	—	—	0'0	—	—	0'0	—	—	—	0'0	—	—	—	—	—	—
20	W. by S.	0'1	W. by S.	0'1	N.W. by W.	0'1	—	0'0	N. by W.	0'1	N.	0'1	—	—	—	—	—	—
21	N.E. by E.	0'4	N.E. by E.	0'4	N.E. by E.	0'6	N.E.	0'5	N.E. by N.	0'6	N.E. by N.	0'5	—	—	—	—	—	—
22	—	0'0	—	—	0'0	E.N.E.	0'1	—	0'0	—	—	0'0	—	—	—	—	—	—
23	—	0'0	—	—	0'0	—	—	0'0	—	—	—	0'0	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25	W.N.W.	0'5	W.N.W.	0'1	W. by N.	0'1	W. by N.	0'1	W.	0'1	W.	0'1	W.	0'1	W.	0'1	W.	0'1
26	N.	0'6	N.	0'6	N.	0'2	N.	0'1	N.	0'1	N.	0'1	N.	0'1	N.	0'1	N.	0'1
27	—	0'0	—	—	0'0	—	—	0'0	—	—	—	0'0	—	—	—	—	—	0'0
28	S. by E.	0'3	S.	0'3	S. by W.	0'1	—	0'0	—	—	—	0'0	—	—	—	—	—	0'0
29	S.S.W.	0'1	—	—	0'0	—	—	0'0	—	—	—	0'0	—	—	—	—	—	0'0
30	—	0'0	S.W. by S.	0'1	W.N.W.	0'1	—	0'0	—	—	—	0'0	—	—	—	—	—	0'0
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

OCTOBER.

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.									
5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.																			
1 ⁰	W.N.W.	0 ⁹	N.W.	0 ⁷	N.W. by W.	0 ⁷	N.W.	0 ⁵	N.W. by W.	0 ³	N.W.	0 ³	N.W.	0 ³	N.N.W.	0 ²	1				
0 ¹	—	0 ⁰	—	0 ⁰	N.N.W.	0 ¹	N. by W.	0 ¹	W.N.W.	0 ¹	S.	0 ²	—	0 ⁰	—	0 ⁰	2				
0 ¹	S. by E.	0 ¹	S.S.E.	0 ¹	E.S.E.	0 ¹	E.S.E.	0 ¹	E. by S.	0 ²	E. by S.	0 ¹	E. by S.	0 ¹	E. by S.	0 ¹	3				
0 ⁵	S.W. by S.	0 ³	S.W. by S.	0 ²	S.S.W.	0 ⁴	S.	0 ⁵	S. by E.	0 ²	S.S.E.	0 ²	S.S.E.	0 ²	—	0 ⁰	4				
0 ⁴	E. by N.	0 ⁵	E. by N.	0 ⁵	E.	0 ⁴	E.N.E.	0 ⁶	E. by N.	0 ⁶	E. by N.	0 ⁶	E. by N.	0 ⁶	E. by N.	0 ⁴	5				
0 ³	E.	0 ³	E.N.E.	0 ²	E. by N.	0 ²	E. by N.	0 ⁴	E.	0 ²	E. by N.	0 ²	E.	0 ²	E.	0 ³	6				
0 ¹	N.	0 ¹	N.	0 ¹	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	N. by W.	0 ¹	7				
0 ²	W.S.W.	0 ³	W. by S.	0 ¹	S.W.	0 ²	S.W. by S.	0 ²	S.W.	0 ⁴	S.S.W.	0 ²	S.S.W.	0 ²	S.W. by S.	0 ³	8				
0 ⁸	N.N.W.	0 ⁶	N.W.	0 ⁸	W. by N.	0 ³	W.N.W.	0 ²	W.	0 ²	W.N.W.	0 ²	W. by S.	0 ¹	W. by S.	0 ¹	9				
0 ⁰	S.S.E.	0 ¹	S.	0 ⁴	S.S.W.	0 ⁴	S.E.	0 ²	S.E. by E.	0 ¹	S.E. by E.	0 ¹	S.E. by E.	0 ¹	E.S.E.	0 ¹	10				
1 ⁰	N.W. by W.	0 ⁹	W.	0 ⁸	W. by N.	0 ⁹	W.S.W.	1 ⁰	W. by S.	0 ⁹	W.N.W.	0 ⁶	W.N.W.	0 ⁶	W.N.W.	0 ⁵	11				
0 ³	N.N.W.	0 ⁴	N.W.	0 ¹	N.W. by N.	0 ⁴	N.W. by N.	0 ³	N.N.W.	0 ³	N.N.W.	0 ³	N.N.W.	0 ³	N.W.	0 ³	12				
0 ⁰	—	0 ⁰	S.S.W.	0 ¹	S. by W.	0 ¹	S.	0 ⁰	S. by E.	0 ¹	S.	0 ⁰	S.	0 ⁰	—	0 ⁰	13				
0 ⁷	S. by E.	0 ⁵	S.E. by S.	0 ⁶	S.E.	0 ⁵	S.E.	0 ⁴	S.E.	0 ⁴	S.E. by E.	0 ²	S.E. by E.	0 ²	S.E. by E.	0 ²	14				
0 ⁰	E. by S.	0 ¹	S.S.E.	0 ²	S.E. by S.	0 ²	S. by W.	0 ⁶	S.S.W.	0 ⁴	S.S.W.	0 ³	S.S.W.	0 ³	S.W. by S.	0 ²	15				
0 ¹	S.W. by W.	0 ²	W. by S.	0 ²	W.	0 ²	W.S.W.	0 ³	W. by S.	0 ³	W. by S.	0 ²	W. by S.	0 ²	W. by N.	0 ³	16				
0 ¹	S. by W.	0 ⁴	S.S.W.	0 ⁵	S.S.W.	0 ⁸	W. by S.	0 ⁵	W.S.W.	0 ⁵	W. by S.	0 ⁵	W. by S.	0 ⁵	W. by S.	0 ²	17				
0 ¹	E.S.E.	0 ¹	N.E. by E.	0 ¹	E.N.E.	0 ¹	E.N.E.	0 ²	N.E. by E.	0 ⁴	E.N.E.	0 ³	E.N.E.	0 ³	E.N.E.	0 ³	18				
0 ⁴	N. by E.	0 ²	N.	0 ⁵	N.E.	0 ²	N. by E.	0 ²	N. by E.	0 ¹	—	0 ⁰	N. by E.	0 ¹	N. by E.	0 ¹	19				
0 ¹	W.N.W.	0 ²	S.S.W.	0 ²	S.S.W.	0 ⁵	S. by W.	0 ⁴	S. by W.	0 ²	S.S.W.	0 ²	S.S.W.	0 ²	S.S.W.	0 ¹	20				
0 ⁸	W. by S.	1 ⁰	N.W. by W.	1 ⁰	W.	0 ⁹	W. by N.	1 ²	W. by N.	1 ⁰	W.N.W.	1 ¹	W.N.W.	1 ¹	N.W.	1 ⁴	21				
0 ⁵	N.	0 ⁴	N.	0 ³	N.	0 ⁶	N.	1 ⁰	N.N.W.	0 ⁷	N. by E.	0 ⁸	N. by E.	0 ⁸	N.	0 ⁷	22				
0 ³	N. by W.	0 ¹	S.S.W.	0 ⁵	S.S.W.	0 ²	S.S.W.	0 ²	S.W. by S.	0 ¹	W.	0 ²	W.	0 ²	W.	0 ¹	23				
0 ¹	S.W. by S.	0 ²	S. by W.	0 ⁴	S.S.W.	0 ⁵	S.	0 ⁵	S. by E.	0 ¹	S. by E.	0 ⁴	S. by E.	0 ⁴	S. by E.	0 ²	24				
0 ⁰	—	—	S.W. by S.	0 ¹	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	S.	0 ¹	25				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0 ⁰	26				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30				
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31				

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.									
16 ^h .			17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			
Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	Force.	Direction.	Force.	
lbs.		lbs.																			
0 ⁰	N. by E.	0 ¹	N. by E.	0 ¹	—	0 ⁰	—	0 ⁰	—	0 ⁰	—	0 ⁰	N.	0 ¹	N.	0 ²	N.	0 ¹	1		
0 ⁰	N.	0 ¹	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4		
0 ³	E. by N.	0 ³	E.N.E.	0 ³	E. by N.	0 ⁴	E. by N.	0 ³	E. by N.	0 ³	E. by N.	0 ³	E. by N.	0 ³	E. by N.	0 ³	E. by N.	0 ⁵	5		
0 ²	E.	0 ⁴	E. by S.	0 ³	E.	0 ³	E. by S.	0 ²	E.	0 ²	E.	0 ²	E.	0 ²	E.	0 ²	E.	0 ³	6		
0 ⁴	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	E. by N.	0 ²	7		
0 ⁶	N.N.W.	0 ⁵	N.W. by N.	0 ³	N.W. by N.	0 ¹	N.W.	0 ¹	—	—	—	—	—	—	—	—	—	—	8		
0 ¹	N.W. by W.	0 ⁶	W. by N.	0 ¹	W.N.W.	0 ⁴	W.	0 ²	W. by N.	0 ³	W. by N.	0 ³	W. by N.	0 ³	W. by N.	0 ³	W. by N.	0 ⁴	9		
0 ⁰	—	0 ⁰	S.W. by W.	0 ²	S.W. by W.	0 ²	W.S.W.	0 ³	W.S.W.	0 ⁴	W.S.W.	0 ³	W.S.W.	0 ⁴	W. by S.	0 ⁴	W.S.W.	0 ²	10		
0 ⁰	W.	0 ¹	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12		
0 ¹	S. by E.	0 ¹	S. by E.	0 ⁴	S. by W.	0 ⁴	S.S.W.	0 ⁶	S.S.W.	0 ⁶	S.S.W.	0 ⁶	S.S.W.	0 ⁶	S.S.W.	0 ⁶	S.S.W.	0 ⁷	13		
0 ³	S.W. by S.	0 ¹	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15		
0 ⁸	W.N.W.	0 ³	W. by N.	0 ¹	W. by N.	0 ¹	W. by N.	0 ¹	W. by N.	0 ¹	W. by S.	0 ¹	W. by S.	0 ¹	W. by S.	0 ¹	—	0 ¹	16		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17		
0 ¹	N.	0 ¹	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18		
0 ⁶	N.E. by N.	0 ⁵	N.E. by N.	0 ⁵	N.E.	0 ⁶	N.E. by N.	0 ⁴	N.E. by N.	0 ⁶	N.E.	0 ³	N.E.	0 ³	N.E.	0 ³	N.E.	0 ²	19		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21		
0 ¹	W.	0 ¹	N.E.	0 ¹	N.E.	0 ¹	N. by E.	0 ¹	N.N.W.	0 ²	N.N.W.	0 ¹	N.N.W.	0 ¹	N.N.W.	0 ¹	N.N.W.	0 ¹	22		
0 ¹	N.	0 ¹	W. by N.	0 ¹	W. by N.	0 ¹	W. by N.	0 ²	W. by N.	0 ²	W. by N.	0 ¹	W. by N.	0 ¹	N.	0 ²	N.	0 ²	23		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29		
0 ⁰	—	0 ⁰	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31		

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
NOVEMBER.	1	—	lbs.	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	W.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	5	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.	0'2	W.S.W.	0'2	N.W. by S.
	6	N. by W.	0'2	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N.
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	0'0	N.E.	0'2	E. by N.	0'2	N.E. by N.	0'2	E.N.E.	0'2	—
	9	—	0'0	S. by W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	S.W.	0'2	N.W.
	10	W. by S.	0'5	W. by S.	0'5	W.S.W.	0'5	W.S.W.	0'5	W.S.W.	0'5	W.N.W.
	11	W. by N.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W.
	12	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.
	13	W.N.W.	0'2	W.N.W.	0'2	N.W.	0'2	N.W.	0'2	N.	0'2	N.
	14	—	—	—	—	—	—	—	—	—	—	—
	15	W.	0'2	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.W.	1'0	N.W. by W.
	16	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	S.S.E.
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	18	E.	0'5	E.N.E.	0'5	E.N.E.	0'5	E.N.E.	0'2	E.N.E.	0'2	E. by N.
	19	N.W. by W.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.W.	1'5	N.W.	1'5	N.W. by N.
	20	—	0'0	—	0'0	N. by E.	0'2	N.E. by E.	0'2	N.N.E.	0'2	E. by N.
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.
	23	E.N.E.	0'5	E.	0'5	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'2	E. by S.
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	25	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	W.
	26	N.W. by N.	2'0	N.N.W.	2'0	N. by W.	1'0	W.N.W.	1'5	W.N.W.	0'5	N.W.
	27	W. by S.	0'5	S.W. by S.	0'2	S.W.	0'2	S.W. by W.	0'2	W.S.W.	1'0	S.W. by W.
	28	—	—	—	—	—	—	—	—	—	—	—
	29	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.	0'2	N.W. by N.	0'2	N.N.W.
	30	S.S.E.	0'5	E.S.E.	0'2	E.S.E.	0'2	—	0'0	S.E. by E.	0'2	S.E. by E.
(continued)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
NOVEMBER.	1	—	lbs.	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	5	N.W. by W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	W.	0'2	W.N.W.	0'2	N.W. by N.
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	0'0	E.N.E.	0'2	—	0'0	E. by S.	0'2	E.	0'2	E.
	9	W.S.W.	0'2	—	0'0	—	0'0	W.S.W.	1'0	W.S.W.	1'0	W.S.W.
	10	W.	0'2	W.	0'5	W.	0'2	W.	0'2	W.S.W.	0'2	—
	11	W.	0'2	W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.
	12	S.W. by W.	1'0	W. by S.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.
	13	E.S.E.	0'5	E.S.E.	1'5	E. by S.	2'5	E. by S.	2'5	E. by S.	3'0	E. by S.
	14	—	—	—	—	—	—	—	—	—	—	—
	15	W.N.W.	1'0	N.N.W.	1'0	W.N.W.	1'0	N.W.	0'2	W. by N.	0'2	W. by N.
	16	S.W.	1'0	S.W.	0'5	S.W. by W.	0'5	—	0'0	—	0'0	W.S.W.
	17	—	0'0	S.E. by E.	0'2	N.E. by E.	0'2	—	0'0	—	0'0	—
	18	N.N.E.	0'2	—	0'0	E.S.E.	0'2	W.S.W.	0'5	W.	2'0	W.S.W.
	19	N.N.W.	1'5	N.W. by N.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'5	N.E.
	20	E.S.E.	0'2	S.E. by E.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	E.S.E.
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	0'0	—	0'0	—	0'0	N.E. by E.	0'2	E.N.E.	0'5	E.N.E.
	23	S. by W.	0'2	S. by W.	0'2	E.S.E.	0'2	E. by N.	0'2	E.N.E.	0'2	E. by S.
	24	N. by E.	0'2	N.	0'2	N.N.W.	0'2	N. by W.	0'5	N.N.W.	0'5	N.N.W.
	25	W.S.W.	0'5	W.S.W.	1'0	W. by S.	1'0	W.N.W.	0'5	N.W. by N.	0'5	N.N.W.
	26	—	—	—	0'0	—	0'0	—	0'0	—	0'0	—
	27	S.W.	1'5	S.W.	1'5	S.W.	1'5	S.W.	1'5	S.W.	1'5	W.S.W.
	28	—	—	—	—	—	—	—	—	—	—	—
	29	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	30	—	0'0	—	0'0	S.E.	0'2	S.E. by S.	0'2	S. by E.	0'2	S. by W.

5 ^h .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	—	0'0
0'0	—	0'0
0'0	S.W.	0'2
0'2	S.W. by S.	0'2
0'2	N.W. by W.	0'2
0'2	N.	0'2
—	—	—
0'2	—	0'0
0'2	N.W.	1'5
0'5	W.N.W.	1'0
0'2	W.	0'2
0'2	W.S.W.	1'0
0'2	N.	0'5
—	—	—
1'0	N.W. by W.	1'5
0'2	S.S.E.	0'2
0'0	—	0'0
0'2	E. by N.	0'2
1'5	N.W. by N.	1'5
0'2	E. by N.	0'2
0'0	N. by W.	0'2
0'2	E. by S.	0'2
0'0	—	0'0
0'2	W.	0'2
0'5	N.W.	0'5
1'0	S.W. by W.	0'5
—	—	—
0'2	N.N.W.	0'2
0'2	S.E. by E.	0'2

17 ^h .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	N.W. by W.	1'0
0'2	N.W. by N.	0'2
0'0	—	0'0
—	—	—
0'2	E.	0'2
1'0	W.S.W.	1'0
0'2	—	0'0
0'2	W.S.W.	0'2
0'2	W. by S.	0'2
3'0	E. by S.	3'0
—	—	—
0'2	W. by N.	0'2
0'0	W.S.W.	0'2
0'0	—	0'0
2'0	W.S.W.	1'5
0'5	N.E.	0'2
0'2	E.S.E.	0'2
—	—	—
0'5	E.N.E.	1'0
0'2	E. by S.	0'2
0'5	N.N.W.	0'5
0'5	N.N.W.	0'5
0'0	—	0'0
1'5	W.S.W.	1'0
—	—	—
0'0	—	0'0
0'2	S. by W.	0'5

DIRECTION AND FORCE OF THE WIND.													Mean Göttingen Time.
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .			
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	—	0'0	1	
—	0'0	—	0'0	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	2	
S.W. by S.	0'2	S.S.W.	0'2	S.W. by W.	0'2	—	0'0	S.W.	0'2	—	0'0	3	
S.S.W.	0'2	S.	0'2	S.S.W.	0'2	S. by W.	0'2	S.	0'2	—	0'0	4	
W. by S.	1'0	N.W. by W.	1'5	N.W.	1'0	N.W. by W.	1'0	W.N.W.	2'0	N.W. by W.	1'5	5	
N.	0'2	—	0'0	N.W.	0'2	—	0'0	N.E. by E.	0'2	S.S.E.	0'2	6	
—	—	—	—	—	—	—	—	—	—	—	—	7	
N.E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	8	
N.W.	1'5	W.N.W.	1'0	W.N.W.	0'5	W.S.W.	0'2	W. by S.	0'2	W.S.W.	0'2	9	
W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	W.N.W.	0'2	W.	0'2	W.	0'5	10	
W. by S.	0'2	W.N.W.	0'2	W. by N.	0'2	W.	0'2	W.	0'2	W.	0'2	11	
W.S.W.	1'0	W. by S.	1'0	W. by S.	1'5	W.S.W.	1'5	W.S.W.	1'0	S.W. by W.	1'5	12	
N. by W.	0'2	—	0'0	S.E. by S.	0'2	E.S.E.	0'2	—	0'0	S.E. by E.	0'2	13	
—	—	—	—	—	—	—	—	—	—	—	—	14	
N.W.	1'5	N.W. by N.	1'5	N.W. by N.	1'5	N.W. by N.	1'0	N.W. by N.	1'5	N.W. by N.	1'0	15	
S.E. by S.	0'2	S.E. by S.	0'2	S.	0'2	S.S.W.	0'5	S.W.	1'0	S.W.	1'0	16	
W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17	
E. by N.	0'2	E.N.E.	0'2	E.	0'2	E. by N.	0'5	—	0'0	N.N.W.	0'2	18	
N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N. by W.	1'5	19	
E. by S.	0'2	E. by N.	0'2	E.S.E.	0'2	S.E.	0'2	E.	0'2	E. by S.	0'2	20	
—	—	—	—	—	—	—	—	—	—	—	—	21	
—	0'0	—	0'0	E.S.E.	0'2	E.	0'2	—	0'0	—	0'0	22	
E.	0'2	E.S.E.	0'2	—	0'0	S.E. by S.	0'2	S.S.E.	0'2	S. by W.	0'2	23	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24	
W.	0'2	S.W. by W.	0'2	S.W.	0'5	S.W. by W.	0'5	S.W. by W.	0'5	W.S.W.	0'5	25	
N.W. by W.	1'0	W.N.W.	1'0	W.N.W.	1'0	N.W. by W.	0'5	N.W. by W.	0'5	N.W.	0'2	26	
W.S.W.	0'5	W.S.W.	1'0	W. by S.	1'5	W.S.W.	1'0	S.W.	1'0	S.W.	1'5	27	
—	—	—	—	—	—	—	—	—	—	—	—	28	
N.N.W.	0'2	N.	0'2	—	0'0	S.S.E.	0'2	S. by E.	0'2	—	0'0	29	
E.	0'2	E.	0'2	S.E. by E.	0'5	E.S.E.	0'2	S.E.	0'2	E.S.E.	0'2	30	

NOVEMBER.

18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	1
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
N.W.	1'0	N.W. by W.	0'5	—	0'0	—	0'0	—	0'0	W. by S.	0'2	5
N.W.	0'2	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N. by W.	0'2	N.W. by N.	0'2	6
—	—	—	—	—	—	—	—	—	—	—	—	7
E.S.E.	0'2	E. by S.	0'2	E. by S.	0'2	I.	0'2	E. by N.	0'2	—	0'0	8
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
W.S.W.	1'0	W. by S.	2'0	W.S.W.	1'5	W.S.W.	1'0	W.S.W.	0'5	W. by S.	0'5	10
W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by N.	0'2	W. by N.	0'2	11
W.S.W.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	12
W.	0'2	W.N.W.	0'2	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	13
—	—	—	—	—	—	—	—	—	—	—	—	14
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
S.W. by W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	17
—	0'0	E.S.E.	0'2	N.E. by E.	0'2	E. by N.	0'2	E.	0'5	E.	0'5	18
W.S.W.	1'5	W. by S.	1'5	W. by S.	1'5	W.N.W.	1'5	N.W. by W.	1'5	N.N.W.	1'5	19
N. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20
—	—	—	—	—	—	—	—	—	—	—	—	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
E.N.E.	1'0	E. by N.	1'0	E. by N.	1'0	I. by N.	0'5	E.N.E.	0'5	E.N.E.	0'2	23
S.E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	S.W.	0'2	—	0'0	24
N.W. by W.	0'5	N.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	25
N.N.W.	1'5	N.W.	1'0	N.W.	1'0	N.W.	1'0	N.W.	1'0	N.N.W.	2'0	26
—	0'0	—	0'0	E. by S.	0'2	W. by S.	0'2	W.S.W.	0'5	W.S.W.	0'5	27
—	—	—	—	—	—	—	—	—	—	—	—	28
N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'5	N.W. by N.	0'2	29
—	0'0	S.E.	0'2	S.E.	0'5	S.E.	0'5	S.E. by S.	0'5	S.S.E.	0'5	30
S. by W.	0'5	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	S.	0'2	30

NOVEMBER.

NOVEMBER.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
DECEMBER.	1	S.	0.5	S.	0.5	S. by W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5
	2	—	0.0	—	0.0	—	0.0	N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	3	N. by W.	0.2	—	0.0	N. by W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	4	N.W. by W.	0.5	W.N.W.	0.2	—	0.0	S. by W.	0.2	E. by N.	0.2	S.S.E.	0.2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	0.0	—	0.0	—	0.0	—	0.0	S.W.	0.2	W.S.W.	0.2
	7	S.S.W.	0.5	S.S.W.	0.2	—	0.0	S.W. by S.	0.2	S.S.W.	0.2	S.W. by S.	0.2
	8	E.S.E.	0.2	S.	0.2	S. by E.	0.2	S. by W.	0.2	S. by W.	0.2	S.	0.2
	9	E.N.E.	0.2	—	0.0	—	0.0	N.E. by E.	0.2	—	0.0	E. by N.	0.2
	10	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0
	11	—	0.0	—	0.0	E. by S.	0.2	W.	0.2	W.S.W.	0.2	W. by S.	0.2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	—	0.0	W.N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—	0.0
	14	N.N.E.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	N. by E.	0.2	N.E.	0.2	N. by E.	0.2
	15	N.	0.2	N. by W.	0.5	N. by W.	1.0	N. by E.	0.5	N.E.	0.5	N.E.	0.5
	16	N. by E.	1.0	N.	0.5	N.N.E.	0.5	N.	0.2	N.N.E.	0.5	N.N.E.	0.5
	17	N.E.	0.2	—	0.0	—	0.0	N.	0.5	N.	1.5	N.	2.5
	18	—	0.0	—	0.0	—	0.0	N.W. by W.	0.2	N.E. by N.	0.2	S.W. by W.	0.2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	N.N.W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N.N.W.	0.5
	21	—	0.0	N.W. by W.	0.2	N.W. by W.	0.2	—	0.0	—	0.0	—	0.0
	22	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	—	0.0	—	0.0
	23	S.W. by S.	0.2	S.W.	0.5	S.W.	0.5	S.W.	0.2	S.W.	1.0	S.W.	0.5
	24	W. by N.	0.5	W. by S.	0.5	W.S.W.	0.5	W. by S.	0.5	N.W.	0.2	N.W. by W.	1.0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	W.	0.2	W.	0.2	W.	0.2	W.	0.2	W.	0.2	—	0.0
	28	S.W.	1.5	S.W. by W.	1.5	S.W.	0.5	S.W.	0.5	S.W.	2.0	S.W. by S.	1.5
	29	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	30	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	0.5
	31	—	0.0	N.E.	0.2	—	0.0	—	0.0	E.	0.2	E. by N.	0.2
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
DECEMBER.	1	—	0.0	—	0.0	—	E.	0.2	—	0.0	—	0.0	
	2	—	0.0	—	0.0	—	—	0.0	—	0.0	—	0.0	
	3	N.W.	1.0	N.W.	1.0	N.N.W.	0.5	N.W. by N.	0.5	N.W.	0.5	N.W.	0.5
	4	S.S.W.	1.0	S. by W.	1.5	S.	1.5	S.	1.5	S. by W.	1.5	S.W. by S.	1.5
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	0.0	S. by E.	0.2	S.W. by W.	0.2	—	0.0	S. by W.	0.2	S.	0.2
	7	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	S.W. by W.	0.5	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by W.	0.2	—	0.0
	9	—	0.0	—	0.0	—	0.0	S. by E.	0.2	—	0.0	S.W. by W.	0.2
	10	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	11	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.	0.2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	N.	0.2	N. by E.	0.2
	14	N.N.E.	0.2	N.	0.2	N.	0.2	N. by E.	0.2	N.N.W.	0.2	N.	0.2
	15	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.5	N.E. by N.	1.0	N.E. by N.	1.0
	16	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	17	N. by W.	0.2	N. by W.	0.2	N.	0.5	N. by E.	0.2	—	0.0	—	0.0
	18	S.W.	1.5	S.W. by W.	1.0	S.W. by W.	1.5	S.W.	0.5	S.W. by W.	0.2	S.W. by W.	0.2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	N. by W.	0.5	N.	0.2	—	0.0	—	0.0	—	0.0	N.	0.2
	21	S.W.	2.0	S.W.	1.5	S.W.	2.0	S.W. by S.	2.5	S.S.W.	2.5	S.W.	2.5
	22	N.W.	1.5	N.W.	1.5	N.W.	1.0	W.	0.5	W.	0.5	W. by N.	0.2
	23	S.W. by W.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	W.S.W.	0.5	S.W. by W.	1.0	W.S.W.	1.0
	24	N.W.	0.2	N.W.	0.2	W.N.W.	0.2	W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	S.	1.0	S.	1.0	S.	1.0	S.	1.0	S.	1.0	S.	0.5
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	—	0.0
	30	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	31	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0

* Christmas Day.

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0.5	S.S.W.	0.5		S.S.W.	0.5	S.S.W.	0.5	S.	0.5	S. by W.	0.2	S.W.	0.2	—	—	—	—	—	—	1	
0.2	N.N.W.	0.2		N.N.W.	0.2	N.N.W.	0.2	N.W. by N.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	—	—	—	—	—	2	
0.2	N.N.W.	0.2		N. by W.	0.5	N. by W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.W.	1.0	N.W.	1.0	N.W.	1.0	3	
0.2	S.S.E.	0.2		S.	0.2	S. by E.	0.2	S.S.E.	0.2	S.	0.2	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	4	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	
0.2	W.S.W.	0.2		W.S.W.	0.2	W. by S.	0.2	S. by W.	0.2	—	0.0	—	0.0	—	0.0	—	—	—	0.0	6	
0.2	S.W. by S.	0.2		S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	—	—	—	0.0	7	
0.2	S.	0.2		S.S.W.	0.5	S.S.W.	0.5	S.W. by S.	0.5	S.W. by S.	1.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	8	
0.0	E. by N.	0.2		E. by N.	0.2	E.N.E.	0.2	N.E. by E.	0.2	E.	0.2	E. by N.	0.2	—	—	—	—	—	0.0	9	
0.0	—	0.0		S.W. by W.	0.2	S.W.	0.5	S.W.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	10	
0.2	W. by S.	0.2		W.	1.0	W. by N.	1.0	W. by S.	0.5	W. by S.	0.5	W. by S.	0.5	W. by S.	0.5	—	—	—	0.0	11	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	
0.0	—	0.0		—	0.0	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	13	
0.2	N. by E.	0.2		N. by E.	0.2	N.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	14	
0.5	N.E.	0.2		N. by E.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	N. by E.	0.5	N. by E.	0.2	N. by E.	0.2	15	
0.5	N.N.E.	0.5		N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.	0.2	N.N.E.	0.2	N.N.E.	0.2	—	—	—	0.0	16	
1.5	N.	2.5		N.	1.5	N.	1.0	N.	0.5	N.	0.0	—	0.0	—	0.0	—	—	—	0.0	17	
0.2	S.W. by W.	0.2		S.W. by W.	0.2	S.W. by S.	0.5	S.W. by S.	0.5	S.W. by S.	0.5	S.W.	0.5	S.W.	0.5	S.W.	0.5	S.W.	0.5	18	
—	—	—		N.	0.2	N.N.W.	1.0	N.	1.0	N.N.W.	1.0	N.W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	1.0	19	
0.5	N.N.W.	0.5		S.W. by W.	0.5	S.W. by W.	0.5	S.W. by W.	1.5	S.W. by S.	1.5	S.W. by S.	1.5	S.W.	1.5	S.W.	1.5	S.W.	1.5	20	
0.0	—	0.0		—	0.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	21	
0.0	—	0.0		S.W. by S.	4.5	S.W.	2.0	S.W.	2.0	S.W. by W.	1.0	W. by S.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	22	
0.2	N.W. by W.	1.0		N.W.	1.0	N.W. by W.	0.5	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	23	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	
0.2	—	0.0		W.	0.2	S.W. by W.	0.5	S.W. by W.	0.2	S.S.W.	0.5	S.S.W.	1.0	S.	1.0	S.	1.0	S.	1.0	25 ^a	
2.0	S.W. by S.	1.5		S.W.	2.5	S.W.	2.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	26	
0.2	S.S.W.	0.2		S.W.	1.5	S.S.W.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	27	
0.2	S.W. by S.	0.5		S.W. by S.	1.0	S.W. by S.	0.5	S.S.W.	0.5	S.W. by S.	0.2	S.W. by S.	0.2	—	0.0	—	—	—	0.0	28	
0.2	E. by N.	0.2		E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	—	—	0.0	29	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0	30	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0	31	

17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			23 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2	
0.5	N.W.	0.5		N.N.W.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	3	
1.5	S.W. by S.	1.5		W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	4	
—	—	—		S. by W.	0.5	S.	0.5	S.	0.5	S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	S.S.W.	0.5	S.S.W.	0.5	5	
0.2	—	0.2		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6	
0.0	—	0.0		—	0.0	W. by N.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	—	0.0	—	—	—	0.0	7	
0.2	S.W. by W.	0.2		—	0.0	—	0.0	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	—	—	0.0	8	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	9	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	10	
0.2	E.N.E.	0.2		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	11	
—	—	—		N.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.2	12	
0.2	N. by E.	0.2		N. by W.	0.2	N.W. by N.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	13	
0.2	N.	0.2		N.E. by N.	1.0	N. by E.	0.5	N. by E.	1.0	N. by E.	1.0	N. by E.	1.0	N. by E.	0.5	N. by E.	0.5	N. by E.	0.5	14	
1.0	N.E. by N.	1.0		—	0.0	N. by E.	0.2	N. by W.	0.2	N. by W.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.E. by N.	0.2	N.E. by N.	0.2	15	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	16	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	17	
0.2	S.W. by W.	0.2		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	18	
—	—	—		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	19	
0.0	—	0.0		—	0.0	N.E. by N.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	20	
2.5	S.W.	2.5		W. by N.	2.0	S.W. by S.	1.5	W.S.W.	1.0	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	21	
0.5	W. by N.	0.2		W.S.W.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	22	
1.0	W.S.W.	1.0		W.S.W.	0.5	W.S.W.	0.2	W. by N.	0.2	W. by N.	1.5	W. by N.	1.5	W. by N.	1.0	W. by N.	1.0	W. by N.	1.0	23	
0.2	W.N.W.	0.2		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	
—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25 ^a	
—	—	—		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	26	
1.0	S.	0.5		S.W.	0.5	S.W.	2.0	S.W.	1.5	S.W. by W.	1.5	S.W.	1.5	S.W.	1.5	S.W.	1.5	S.W.	1.5	27	
0.0	—	0.0		—	0.0	S.W. by W.	2.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	28	
0.2	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	29	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	30	
0.0	—	0.0		—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	—	0.0	31	

DECEMBER.

DECEMBER.

DIRECTION AND FORCE OF THE WIND.													
Mean Gottingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	—	0'0	S.E. by E.	0'2	E.S.E.	0'2	S.E. by E.	0'2	—	0'0	—	0'0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	S.W. by S.	0'5	S.W.	0'5	S.W.	1'0	S.W. by S.	1'5	S.W. by S.	1'0	S.W. by S.	0'5
	4	N.W.	1'0	W.N.W.	1'0	N.W.	0'5	N.W.	0'5	N.N.W.	1'5	N.W.	1'0
	5	—	0'0	—	0'0	S.E.	1'0	E.S.E.	1'0	S.E. by S.	1'0	S.E. by S.	1'0
	6	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2
	7	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.E. by N.	0'2	N.E.	0'2
	8	S. by W.	0'5	S. by W.	0'5	S.W. by S.	0'5	S.W.	0'2	S.W.	0'2	—	0'0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.	0'2	N.	0'2	N. by E.	0'2	N.	0'2	N.	0'2	N.	0'2
	11	S.W.	0'2	S.W.	0'2	S.S.W.	2'5	S. by W.	3'0	S.S.W.	2'5	S.S.W.	2'0
	12	N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13	S.E. by S.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.E. by E.	0'2
	15	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	N.W.	1'0	N.W.	2'0	N.W.	2'0	N.W. by W.	1'5	N.W. by W.	1'5	N.W. by W.	1'0
	18	W. by S.	1'0	W. by N.	2'0	W. by N.	5'0	W. by N.	2'5	N.W. by N.	3'5	N.W.	3'0
	19	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	20	S.W. by S.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'5	S. by W.	0'5	S. by W.	0'5
	21	S.W.	1'5	S.W.	1'5	S.W. by W.	0'2	W.S.W.	0'5	W.S.W.	1'0	W.	1'5
	22	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	E.S.E.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	E.N.E.	0'2	N.E.	0'2	E. by N.	0'5	E. by N.	0'2	E.	0'2	E.	0'2
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	26	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	W. by S.	1'0	W.S.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	0'5	S.S.W.	0'5
	29	—	0'0	N.W.	0'2	N.W. by N.	0'5	N.W. by N.	0'2	N.W.	0'5	N.W. by N.	1'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E.	2'0	E.N.E.	0'5	E.	0'5	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2
(continued)													
Mean Gottingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	N.N.W.	lbs.	2'5	N.N.W.	lbs.	2'0	N.N.W.	lbs.	1'0	N.N.W.	lbs.	1'0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	S.S.W.	0'2	S.W.	1'0	S.W. by W.	0'5	S.W. by W.	0'5	S.W. by W.	0'5	W.S.W.	0'2
	4	N. by W.	0'5	N.	0'5	N.	0'2	N. by E.	0'2	N. by E.	0'5	N.N.E.	0'2
	5	W. by N.	5'5	W. by S.	4'0	W. by N.	3'0	N.W. by N.	4'0	N.W. by N.	2'5	N.W. by N.	1'5
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	1'0	S.E. by S.	1'5	S. by E.	1'5	S. by E.	1'0
	8	N.W. by W.	0'5	N.N.W.	0'2	N.	0'2	N.	0'2	N. by W.	0'5	N. by W.	0'5
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	0'0	N.	0'2	—	0'0	N.	0'2
	11	W.S.W.	0'2	W.S.W.	0'5	W.S.W.	0'5	W.S.W.	0'2	W.S.W.	0'5	W.S.W.	0'2
	12	—	0'0	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2
	13	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	14	E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	15	N.W. by W.	1'5	N.W. by W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	S.S.W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	S. by W.	0'2	S.W.	0'2	S.S.W.	0'2
	18	W.N.W.	1'5	N.W.	1'5	N.W.	1'5	N.W.	1'0	N.W.	1'0	N.W.	1'5
	19	S.S.E.	0'2	S.	1'0	S.	1'0	S. by E.	1'0	S. by E.	1'0	S.	0'5
	20	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2
	21	N.W. by N.	2'0	N.W. by N.	2'0	N.W. by N.	2'0	N.W.	1'5	N.W.	1'5	N.W.	1'5
	22	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'5	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by N.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	26	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	S.	0'2	W. by N.	1'0	S.W. by S.	0'2	S.W. by S.	0'2
	29	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	W.N.W.	0'2	—	0'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	W.S.W.	2'0	W.S.W.	2'0	W.S.W.	1'5	W.S.W.	2'0	W.S.W.	2'0	W.S.W.	1'0

DIRECTION AND FORCE OF THE WIND.

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
0'0	—	0'6	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	1		
1'0	S.W. by S.	0'5	S.W. by S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	0'5	S.W.	0'5	2		
1'5	N.W.	1'0	N.W.	2'0	N.W. by N.	2'0	N.N.W.	2'0	N.N.W.	2'0	N. by W.	1'0	N. by W.	1'0	N.	0'5	N.	0'5	3		
1'0	S.E. by S.	1'0	S.S.E.	0'5	S.S.W.	0'5	S.W. by W.	0'5	W.S.W.	0'5	W.S.W.	0'5	W. by N.	2'0	W. by N.	6'0	W. by N.	6'0	4		
0'2	N.W. by W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5		
0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	—	0'0	6		
0'2	—	0'0	—	0'0	—	0'0	S.W.	0'2	N.W.	0'5	N.W.	0'2	N.W.	0'2	N.W. by W.	0'5	—	—	7		
0'2	—	0'2	N.	0'2	N.N.W.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	—	8		
2'5	S.S.W.	2'0	S.W.	2'0	S.W.	1'5	S.W.	1'5	S.W. by W.	1'0	W.S.W.	0'5	W.S.W.	0'5	W.S.W.	0'2	—	—	9		
0'0	—	0'0	—	0'0	N.E.	0'2	E. by N.	0'2	S.E.	0'2	—	0'0	—	0'0	—	0'0	—	—	10		
0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	—	11		
0'0	S.E. by E.	0'2	S.E. by E.	0'2	—	0'0	—	0'0	S.E.	0'2	—	0'0	—	0'0	—	0'0	—	—	12		
0'0	S. by E.	0'2	S.	0'2	S. by W.	0'2	—	0'0	—	0'0	—	0'0	W. by N.	0'2	N.W. by W.	1'5	—	—	13		
1'5	N.W. by W.	1'0	N.W. by N.	0'5	W.N.W.	0'2	—	0'0	N.W. by W.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	—	—	14		
3'5	N.W.	3'0	N.W.	4'0	N.W. by N.	4'0	W.N.W.	3'0	N.W.	3'0	W.N.W.	3'0	W.N.W.	3'0	W.N.W.	3'0	—	—	15		
0'0	—	0'0	—	0'0	S.E. by S.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	—	16		
0'5	S. by W.	0'5	S. by W.	0'5	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	—	17		
1'0	W.	1'5	N.W.	2'0	W. by N.	2'5	N.N.W.	2'5	N.W.	3'0	N.W.	3'0	N.W.	3'0	N.W.	3'0	—	—	18		
0'0	E.S.E.	0'2	S.E. by S.	0'2	S.E.	0'5	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	—	—	19		
0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2	—	0'0	E.	0'2	—	0'0	—	0'0	—	—	20		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	21		
0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	—	0'0	—	—	22		
0'0	—	0'0	—	0'0	S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	—	0'0	—	—	23		
0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	—	—	24		
0'5	N.W. by N.	1'0	N.W. by N.	0'5	N.W. by W.	0'5	N.W.	0'5	N.W.	0'2	N.W.	0'2	N.W. by W.	0'2	W.N.W.	0'2	—	—	25		
0'2	E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2	S.W. by W.	1'0	W.S.W.	1'5	—	—	26		

JANUARY.

17 ^h .			18 ^h .			19 ^h .			20 ^h .			21 ^h .			22 ^h .			23 ^h .			Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
1'0	N.N.W.	1'0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1		
0'5	W.S.W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W. by S.	0'5	S.W. by S.	0'5	—	—	—	—	2		
0'5	N.N.E.	0'2	W.S.W.	0'2	W.	0'2	W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	—	3		
2'5	N.W. by N.	1'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	4		
0'0	—	0'0	W.N.W.	1'0	N.W.	1'0	N.W.	1'5	N.W.	1'0	N.W.	0'5	N.W.	0'5	—	—	—	—	5		
1'5	S. by E.	1'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	6		
0'5	N. by W.	0'5	S.	1'0	S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S. by W.	0'5	S.S.W.	0'5	—	—	—	—	7		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8		
0'0	N.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'5	N.	0'2	—	0'0	N.	0'2	—	0'0	N.	0'2	9		
0'5	W.S.W.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	—	0'0	N.	0'2	10		
0'2	E.S.E.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	—	0'0	W. by S.	0'2	W. by S.	0'2	—	0'0	W. by S.	0'2	11		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	S.E. by S.	0'2	12		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	13		
0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	14		
—	—	—	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	15		
0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.W.	0'5	W.S.W.	0'5	W. by S.	0'2	W. by S.	0'2	—	0'0	W. by S.	0'5	16		
1'0	N.W.	1'5	N.W.	1'0	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	N.N.E.	0'2	17		
1'0	S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	S.W. by S.	0'2	18		
0'0	S.W. by S.	0'2	S.W. by W.	0'5	S.W. by W.	0'5	S.W.	1'0	S.W.	1'5	S.W.	1'5	S.W.	1'5	—	0'0	S.W.	1'5	19		
1'5	N.W.	1'5	N.W. by N.	1'5	N.W.	1'5	N.W.	0'5	N.W.	0'2	N.W.	0'2	N.N.W.	0'2	—	0'0	N.N.W.	0'2	20		
0'2	N.E. by N.	0'2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21		
—	—	—	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	E.S.E.	0'2	22		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	23		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'2	24		
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	—	25		
0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	W.S.W.	1'0	W.S.W.	1'5	W.S.W.	1'5	—	0'0	W.S.W.	1'5	26		
2'0	W.N.W.	2'5	W. by N.	1'0	W. by N.	1'0	W.	1'0	W.	1'0	W.	1'0	W.	1'0	—	0'0	W. by N.	0'5	27		
0'2	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28		
—	—	—	E.	1'5	E. by S.	1'0	E.	1'0	E.	1'0	E.	1'0	E. by N.	1'0	—	0'0	E.	1'5	29		
2'0	W.S.W.	1'0	W.S.W.	0'5	W.S.W.	0'5	S.W. by W.	0'5	S.W.	0'5	S.W.	0'5	S.W.	0'5	S.W. by S.	1'0	—	—	30		

JANUARY.

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
FEBRUARY.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
	1 S.W. by S.	1'0	S.W. by W.	1'0	S.W.	0'5	W.S.W.	0'2	W.S.W.	0'2	W. by S.	1'5
	2 —	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	E.	0'2
	3 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2
	4 —	0'0	E. by N.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E.S.E.	0'2
	5 W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W.N.W.	0'5
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 N.W. by N.	2'0	N.W.	2'0	N.W. by N.	2'0	N.W. by N.	2'0	N.W.	2'5	N.W. by N.	2'0
	8 N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.	0'2	E. by N.	0'5
	9 W.N.W.	0'2	W.N.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	1'5	S.S.W.	2'0
	10 N. by W.	2'0	N. by W.	1'5	N. by W.	2'0	N.N.W.	2'5	N.N.W.	2'0	N. by W.	2'0
	11 N. by E.	0'5	N.N.E.	0'2	N. by E.	0'2	N.	0'5	N.	0'2	N.	0'2
	12 N.E. by N.	0'5	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N. by E.	0'2	N.	0'2
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 —	0'0	—	0'0	—	0'0	—	0'0	N.E.	0'2	N. by W.	0'2
	15 N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2
	16 —	0'0	N. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	17 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18 S.E. by E.	0'2	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	19 S.E. by E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 W.N.W.	1'5	W.	1'5	W.N.W.	1'5	W. by N.	1'0	N.W. by W.	1'5	N.W.	1'5
	22 —	0'0	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	E.S.E.	0'2
	23 N.W.	0'2	—	0'0	W.	0'2	W.S.W.	0'2	W.	0'5	W.	1'0
	24 N.W. by W.	1'5	W.N.W.	0'5	W.N.W.	0'5	N.W.	1'0	N.W.	1'5	N.W.	1'5
	25 N.E. by E.	0'2	N.E.	0'2	N.E.	0'2	E.	0'2	E. by S.	0'2	S.E.	0'2
	26 S.E. by E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	S.W. by S.	0'2	S.W.	0'5
	27 —	—	—	—	—	—	—	—	—	—	—	—
	28 S. by E.	0'5	S.S.E.	0'5	S.S.E.	1'0	S. by E.	1'5	S. by E.	2'0	S.S.E.	1'5
	29 N.W.	0'2	N.W. by W.	0'5	N. by W.	0'2	N.N.W.	0'5	N. by W.	0'2	N.W. by W.	0'5
(continued)												
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
FEBRUARY.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
	1 W.N.W.	0'5	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	2 E.	0'2	E.	0'2	—	0'0	E.	0'2	—	0'0	E. by N.	0'2
	3 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	4 —	0'0	—	0'0	W.N.W.	0'2	W.N.W.	0'5	W.N.W.	0'2	W.	0'2
	5 W.N.W.	1'5	W.N.W.	1'5	W.N.W.	1'5	W. by N.	1'5	W.N.W.	1'0	W.N.W.	1'0
	6 —	—	—	—	—	—	—	—	—	—	—	—
	7 —	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'5	N. by E.	0'5
	8 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	9 W.S.W.	1'5	W. by S.	0'5	N.W. by N.	0'5	N.W.	1'0	N.W. by W.	0'5	N.W. by W.	0'5
	10 N.	0'5	N. by E.	0'5	N. by E.	0'5	N. by E.	0'2	N. by E.	0'5	N. by E.	0'5
	11 —	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2
	12 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13 —	—	—	—	—	—	—	—	—	—	—	—
	14 N. by W.	0'5	N. by W.	0'5	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0
	15 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	16 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	17 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19 E.N.E.	0'5	E.N.E.	0'5	E. by N.	0'5	E.	0'5	E.	0'5	E.	0'5
	20 —	—	—	—	—	—	—	—	—	—	—	—
	21 —	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	—	0'0
	22 E.N.E.	0'2	E.N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	—	0'0
	23 W. by N.	1'5	W.N.W.	1'5	W.N.W.	2'0	W.	1'0	W.N.W.	0'5	W.N.W.	0'5
	24 N.	1'5	N.	1'5	N.	1'5	N. by W.	0'5	N.N.W.	0'5	N.N.W.	0'5
	25 —	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	26 W. by S.	0'2	W. by S.	0'2	W.	0'2	W. by N.	0'2	N.W.	0'2	N.W. by W.	0'2
	27 —	—	—	—	—	—	—	—	—	—	—	—
	28 N.W. by W.	0'5	W.S.W.	0'2	N.W. by W.	0'2	—	0'0	N. by W.	0'2	N. by E.	0'2
	29 N.W.	1'0	N.N.W.	1'5	—	0'0	—	0'0	—	0'0	W.N.W.	0'2

5 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0.2	W. by S.	1.5
0.2	E.	0.2
0.0	E.S.E.	0.2
0.2	E.S.E.	0.2
0.5	W.N.W.	0.5
2.5	N.W. by N.	2.0
0.2	E. by N.	0.5
1.5	S.S.W.	2.0
2.0	N. by W.	2.0
0.2	N.	0.2
0.2	N.	0.2
0.2	N. by W.	0.2
0.0	N. by W.	0.2
0.0	—	0.0
0.0	—	0.0
0.2	E.	0.2
1.5	N.W.	1.5
0.2	E.S.E.	0.2
0.5	W.	1.0
1.5	N.W.	1.5
0.2	S.E.	0.2
0.2	S.W.	0.5
2.0	S.S.E.	1.5
0.2	N.W. by W.	0.5

17 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0.0	—	0.0
0.0	E. by N.	0.2
0.0	—	0.0
0.2	W.	0.2
1.0	W.N.W.	1.0
0.5	N. by E.	0.5
0.0	—	0.0
0.5	N.W. by W.	0.5
0.5	N. by E.	0.5
0.2	N.N.E.	0.2
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.5	E.	0.5
0.2	—	0.0
0.0	—	0.0
0.5	W.N.W.	0.5
0.5	N.N.W.	0.5
0.0	—	0.0
0.2	N.W. by W.	0.2
0.2	N. by E.	0.2
0.0	W.N.W.	0.2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
W.	1.0	W.S.W.	0.5	W. by S.	0.5	W.	0.2	W.	1.0	W.N.W.	0.5	1
—	0.0	—	0.0	—	0.0	E.	0.2	—	0.0	E.	0.2	2
—	0.0	S.E.	0.2	—	0.0	S.S.W.	0.2	—	0.0	—	0.0	3
E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.	0.2	E.	0.2	4
W.N.W.	0.5	W. by N.	0.5	N.W.	1.0	W. by N.	1.0	N.W.	1.0	W.N.W.	1.5	5
—	—	—	—	—	—	—	—	—	—	—	—	6
N.W.	3.0	N.W.	2.5	N.N.W.	2.0	N.	1.0	N.N.W.	0.5	N. by W.	0.5	7
E.	0.2	E. by S.	0.5	E. by N.	0.2	E.S.E.	0.2	—	0.0	—	0.0	8
S.S.W.	2.0	S.W. by S.	2.0	S.S.W.	2.5	S.S.W.	3.0	S.W. by W.	2.0	W.S.W.	2.0	9
N. by W.	1.5	N.	1.5	N.	1.5	N.	1.5	N. by E.	1.0	N. by E.	1.0	10
N. by W.	0.2	N.W. by N.	0.2	E.N.E.	0.2	N.E. by E.	0.2	N.N.E.	0.2	—	0.0	11
N.	0.2	—	0.0	—	0.0	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	12
—	—	—	—	—	—	—	—	—	—	—	—	13
N. by W.	0.2	N.E.	0.2	N.E.	0.5	N.E. by N.	0.5	N. by E.	0.5	N. by W.	0.2	14
N.N.W.	0.5	N.N.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.W.	0.2	S.W.	0.2	15
—	0.0	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	—	0.0	—	0.0	16
E.S.E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	—	0.0	17
—	0.0	—	0.0	—	0.0	E.S.E.	0.2	—	0.0	—	0.0	18
E.	0.2	E.	0.2	E.	0.2	E. by N.	0.5	E.N.E.	0.5	E.N.E.	0.5	19
—	—	—	—	—	—	—	—	—	—	—	—	20
W.N.W.	1.5	W.N.W.	1.0	W.N.W.	1.0	W.	0.5	W.	0.5	—	0.0	21
E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.N.E.	0.2	E. by N.	0.2	22
W. by N.	1.5	W.S.W.	3.0	W.	3.0	W. by N.	2.0	W.	2.0	W. by N.	2.0	23
N.W.	1.0	N.W.	1.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.E.	1.0	24
S.E.	0.2	S.E. by S.	0.2	S. by E.	0.2	S. by E.	0.2	S.S.E.	0.2	—	0.0	25
S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.W. by W.	0.2	W. by N.	0.2	W. by S.	0.5	26
—	—	—	—	—	—	—	—	—	—	—	—	27
S.S.E.	1.0	S.S.E.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W. by N.	0.2	28
N.W.	1.5	N.W. by N.	2.5	N.W. by N.	2.5	N.N.W.	2.5	N.W. by N.	2.5	N.N.W.	2.0	29

FEBRUARY.

FEBRUARY.

18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
—	0.0	—	0.0	—	0.0	N.	0.2	N. by E.	0.2	N. by E.	0.2	1
E. by N.	0.2	E. by N.	0.2	—	0.0	E. by N.	0.2	E. by N.	0.2	—	0.0	2
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
W.	0.2	W.	0.2	W.	0.5	W. by S.	0.2	W. by S.	0.2	W. by S.	0.5	4
—	—	—	—	—	—	—	—	—	—	—	—	5
N.W. by N.	5.0	N.W. by N.	1.5	N.W. by N.	2.5	N.W. by N.	2.0	N. by W.	1.5	N.N.W.	1.0	6
N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E. by E.	0.2	7
—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	W.N.W.	0.2	8
N.W. by W.	0.2	N.W. by W.	1.5	N.W. by W.	1.5	N.W. by W.	1.0	N.W. by W.	2.0	N.N.W.	2.5	9
N.	1.0	N.	0.5	N.	0.5	N. by E.	0.5	N. by E.	0.5	N. by E.	0.5	10
N.N.E.	0.2	N. by E.	0.5	N. by E.	0.5	N. by E.	0.2	N. by E.	0.5	N.N.E.	0.5	11
—	—	—	—	—	—	—	—	—	—	—	—	12
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	N. by W.	0.2	14
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	17
—	0.0	—	0.0	E.S.E.	0.2	E.S.E.	0.2	—	0.0	—	0.0	18
—	—	—	—	—	—	—	—	—	—	—	—	19
W. by N.	2.0	W. by N.	3.0	W.N.W.	2.5	W.N.W.	2.0	W.N.W.	2.0	W.N.W.	1.5	20
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
—	0.0	N. by E.	0.2	—	0.0	N. by W.	0.2	—	0.0	—	0.0	22
N.W. by W.	1.0	N.W. by W.	2.5	N.N.W.	1.5	N.W. by N.	1.5	N.W. by N.	2.5	N.W. by W.	1.5	23
N.N.E.	0.5	N. by E.	0.5	N.N.E.	0.5	N.E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	24
—	0.0	—	0.0	—	0.0	S.E. by S.	0.2	—	0.0	—	0.0	25
—	—	—	—	—	—	—	—	—	—	—	—	26
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S. by W.	0.2	27
N.	0.5	N.	1.0	N. by W.	1.0	N.N.W.	1.0	N.N.W.	0.5	N.W.	0.2	28
—	0.0	N.W. by W.	0.2	W. by N.	0.2	W.N.W.	0.5	W.N.W.	0.5	N. by E.	0.2	29

FEBRUARY.

FEBRUARY.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.		0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	N. by E.	0.2	N. by E.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2
	2	N.N.W.	0.2	N.N.W.	0.2	N. by E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2
	3	N.N.E.	0.2	N.	0.2	N.	0.2	N.	0.2	N. by W.	0.2	—	0.0
	4	W. by S.	1.0	W.	0.5	W. by S.	0.2	W.S.W.	0.2	S.W. by W.	0.2	S.W. by S.	1.0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W. by S.	2.0	W. by S.	0.5	W.S.W.	0.5	W. by S.	1.0	W. by S.	1.5	W.S.W.	1.0
	7	N.	0.2	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	S.S.E.	0.2
	8	S.	0.2	S.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.S.W.	0.2	S.S.W.	1.0
	9	N. by W.	1.0	N.W.	0.5	N.N.W.	0.2	N.	0.5	N. by W.	0.5	N. by W.	0.5
	10	N.	0.5	N.	0.2	N.	0.2	N.N.W.	0.2	N.N.W.	0.5	N.N.W.	0.5
	11	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	W.N.W.	1.0	W. by N.	1.0	W.N.W.	1.5	W.N.W.	2.0	W.N.W.	2.0	W.N.W.	2.0
	14	N.W. by W.	1.0	N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	W. by N.	1.0	W. by N.	1.0
	15	—	0.0	N.N.W.	0.2	N. by W.	0.2	N. by W.	0.5	N.W. by N.	1.0	N.W. by W.	1.5
	16	N.W. by N.	0.2	—	0.0	—	0.0	S.W. by S.	0.2	S.W. by S.	0.5	S.S.W.	0.5
	17	E.S.E.	1.5	E.	1.5	E.	2.0	E. by N.	1.5	E.N.E.	1.5	E.N.E.	1.5
	18	N.N.E.	0.2	—	0.0	N.E. by E.	0.2	E.	0.2	E.	0.2	S.E. by E.	0.2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.5	E.N.E.	0.5
	21	N.W.	0.5	N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.W.	1.0	N.W. by W.	0.5
	22	N.N.W.	0.2	N.	0.2	N.	0.2	N. by E.	0.2	E. by S.	0.2	N.E. by N.	0.2
	23	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2
	24	N. by W.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.E. by E.	0.2	S.E. by E.	0.2	S.E.	0.2
	25	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	N.N.E.	0.5	N. by E.	0.2	—	0.0	—	0.0	—	0.0	N. by W.	0.2
	28	—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	—	0.0
	29	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	S. by W.	0.2
	30	N.	0.2	S.E. by E.	0.2	E.	0.2	E.	0.5	E. by S.	0.5	N.E. by E.	0.5
	31	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by S.	0.2
(continued)													
Mean Göttingen Time.		12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	N.W.	0.5	W.N.W.	1.0	N.W.	0.2	N.W. by W.	0.2	W.	0.2	W.	0.2
	2	N.E. by N.	0.5	N.E. by N.	0.5	N.E.	1.0	N.E. by N.	1.0	N.E.	0.5	N.N.E.	1.0
	3	N.W. by W.	2.0	N.W. by W.	2.5	W.N.W.	1.5	W.N.W.	1.5	W. by N.	1.0	W.	0.5
	4	S.W. by W.	2.5	W.S.W.	1.5	W.S.W.	1.0	W.S.W.	0.5	W.S.W.	1.0	W.S.W.	1.5
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W.N.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	7	S.W.	0.2	—	0.0	—	0.0	—	0.0	S.W.	0.2	—	0.0
	8	N.W. by N.	0.2	S.W. by W.	0.2	S.W.	0.2	S.W. by S.	0.2	S.W.	0.2	S.W.	0.2
	9	N.	0.2	N.	0.5	N.N.E.	0.2	N. by E.	0.2	N.E.	0.2	N.E.	0.2
	10	N.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.W. by N.	0.2	N.W. by N.	0.2
	11	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	W. by N.	1.5	N.W. by W.	1.0	W.N.W.	1.0	N.W. by W.	1.0	N.W.	1.0	N.W.	0.5
	14	N.N.W.	2.5	N. by W.	2.0	N.N.W.	2.0	N.N.W.	1.5	N.N.W.	1.0	N.N.W.	0.5
	15	N. by W.	1.0	N. by W.	1.0	N.N.W.	1.0	N.N.W.	0.5	N.N.W.	0.2	N.W. by N.	0.2
	16	S.	0.5	S. by E.	0.5	S.S.E.	0.5	S.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2
	17	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0
	18	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	E. by N.	0.5	E. by N.	0.5	E. by N.	0.2	S.S.E.	0.2	—	0.0	W.S.W.	0.2
	21	N.	0.5	N.	0.5	N.	0.5	N. by W.	0.2	—	0.0	—	0.0
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	23	S.	0.2	—	0.0	—	0.0	N.W. by W.	0.2	—	0.0	—	0.0
	24	E.	0.2	—	0.0	E. by N.	0.2	E. by S.	0.2	E.	0.5	—	0.0
	25	E. by N.	0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	W.N.W.	0.2	N. by E.	0.2	N. by E.	0.2	N.	1.0	N. by W.	0.5	—	0.0
	30	E. by N.	0.2	E.	0.2	E. by S.	0.2	—	0.0	—	0.0	—	0.0
	31	S.W. by S.	0.2	S.W. by S.	0.2	S.S.W.	0.5	S.W.	0.5	N.W.	1.5	N.W. by W.	3.0

5 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0'2	N. by W.	0'2
0'2	N.E.	0'2
0'2	—	0'0
0'2	S.W. by S.	1'0
—	—	—
1'5	W.S.W.	1'0
0'2	S.S.E.	0'2
0'2	S.S.W.	1'0
0'5	N. by W.	0'5
0'5	N.N.W.	0'5
0'0	—	0'0
—	—	—
2'0	W.N.W.	2'0
1'0	W. by N.	1'0
1'0	N.W. by W.	1'5
0'5	S.S.W.	0'5
1'5	E.N.E.	1'5
0'2	S.E. by E.	0'2
—	—	—
0'5	E.N.E.	0'5
1'0	W. by N.	0'5
0'2	N.E. by N.	0'2
0'2	N.N.E.	0'2
0'2	S.E.	0'2
0'2	E.	0'5
—	—	—
0'0	N. by W.	0'2
0'2	—	0'0
0'2	S. by W.	0'2
0'5	N.E. by E.	0'5
0'0	S.E. by S.	0'2

17 ^h .		
Force.	Direction.	Force.
lbs.		lbs.
0'2	W.	0'2
0'5	N.N.E.	1'0
1'0	W.	0'5
1'0	W.S.W.	1'5
—	—	—
0'0	—	0'0
0'2	—	0'0
0'2	S.W.	0'2
0'2	N.E.	0'2
0'2	N.W. by N.	0'2
0'0	—	0'0
—	—	—
1'0	N.W.	0'5
1'0	N.N.W.	0'5
0'2	N.W. by N.	0'2
0'2	E.S.E.	0'2
0'2	—	0'0
0'0	—	0'0
0'0	W.S.W.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	—	0'0
0'0	—	0'0
1'5	N.W. by W.	3'0

DIRECTION AND FORCE OF THE WIND.													Mean Göttingen Time.
6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .			
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
N.W. by N.	0'2	W.	0'2	W.	1'0	W.	1'0	W.	1'0	N.W.	1'0	1	
E.N.E.	0'2	E.N.E.	0'2	E.S.E.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	1'0	2	
W.S.W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	W.	1'5	W.	1'0	W.N.W.	2'0	3	
S.W.	1'5	S.W.	1'5	S.W.	1'5	S.W.	2'0	S.W.	2'0	S.W.	2'5	4	
—	—	—	—	—	—	—	—	—	—	—	—	5	
W.S.W.	1'0	W. by S.	1'0	W.	1'5	W.N.W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	6	
S.E. by S.	0'2	S.E.	0'2	S.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	7	
S.S.W.	1'0	S.W.	1'0	S.W.	0'5	S.W. by W.	1'0	N.W.	3'0	N.W. by N.	2'0	8	
N.	0'5	N. by E.	0'2	N.E. by N.	0'2	N.E. by E.	0'2	N.	0'2	N.	0'2	9	
N.N.W.	0'5	N.W.	0'5	N.W. by N.	0'5	N.N.W.	0'5	N.	0'5	N.	0'5	10	
S. by W.	0'2	S. by E.	0'2	S. by E.	0'2	S.S.E.	0'2	S.E. by E.	0'2	S.E.	0'2	11	
—	—	—	—	—	—	—	—	—	—	—	—	12	
W.N.W.	2'0	W. by N.	2'0	W. by N.	2'0	N.N.W.	1'5	W.N.W.	1'5	W.N.W.	2'0	13	
W.N.W.	1'0	N.N.W.	1'5	N.W.	2'0	N.N.W.	2'0	N. by E.	2'0	N.W. by N.	2'5	14	
N.N.W.	1'5	N.N.W.	2'0	N.N.W.	2'0	N.N.W.	2'5	N. by W.	2'0	N. by W.	1'5	15	
S.S.W.	0'5	S. by W.	0'5	S. by E.	0'5	S. by E.	1'0	S.S.E.	0'5	S.S.E.	0'5	16	
E.N.E.	1'5	E.S.E.	1'0	E. by S.	0'5	E. by S.	0'5	E. by S.	0'2	E.N.E.	0'2	17	
S.E. by E.	0'2	—	0'0	—	0'0	E. by S.	0'2	—	0'0	—	0'0	18	
—	—	—	—	—	—	—	—	—	—	—	—	19	
E.N.E.	0'2	E.N.E.	0'5	E.N.E.	1'0	E.N.E.	1'5	E.N.E.	2'0	E.N.E.	1'0	20	
N.W. by W.	0'5	N.W.	1'0	N.W.	1'5	W.N.W.	1'5	N.W.	1'0	N. by W.	0'5	21	
S.E. by E.	0'2	E.S.E.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	22	
S.S.W.	0'2	E.	0'5	S.S.E.	0'5	S. by W.	0'2	S.	0'2	S.	0'2	23	
S.E. by E.	0'2	S.E. by E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	24	
E. by N.	0'5	E.N.E.	0'5	E. by N.	0'5	E.N.E.	0'5	E. by N.	0'2	E. by N.	0'2	25	
—	—	—	—	—	—	—	—	—	—	—	—	26	
S.W.	0'2	N.N.W.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E. by E.	0'2	27	
S.E. by S.	0'2	E.S.E.	0'2	S.E. by E.	0'2	E.	0'2	S.E.	0'2	—	0'0	28	
S.S.W.	0'2	S.S.W.	0'2	W. by S.	0'5	S.W. by W.	0'2	W. by N.	0'2	W. by N.	0'2	29	
E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.	0'2	E.	0'5	E.	0'5	30	
S.W. by S.	0'2	S.W.	1'5	W.S.W.	1'5	W.	1'0	W.	0'2	W.S.W.	0'2	31	

MARCH

18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
N.E.	1'0	N.E.	0'2	N.E.	0'2	N.E. by N.	0'2	N.E. by N.	0'5	N.E.	0'2	2
W.	0'5	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'5	W.S.W.	0'5	3
—	—	—	—	—	—	—	—	—	—	—	—	4
W. by S.	2'0	S.W.	1'5	S.W. by W.	1'0	W.S.W.	0'5	W.S.W.	0'5	W. by S.	1'5	5
—	0'0	—	0'0	—	0'0	N.N.W.	0'2	—	0'0	—	0'0	6
—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.S.E.	0'2	S. by W.	0'2	S.	0'2	7
S.W. by W.	0'2	N.N.W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	8
N.E.	0'2	N.E.	0'2	N. by E.	0'2	N. by E.	0'5	N. by E.	0'5	N. by W.	0'5	9
N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
—	—	—	—	—	—	—	—	—	—	—	—	11
W.N.W.	1'5	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0	W. by N.	0'5	12
N.W.	0'2	N.W. by W.	0'2	N.W.	0'2	N.W. by W.	0'5	N.W. by W.	0'5	N.W. by W.	0'5	13
N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	14
N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'5	E.S.E.	1'5	16
N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	17
—	—	—	—	—	—	—	—	—	—	—	—	18
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
S.W. by W.	0'2	W.	0'2	—	0'0	W.	0'2	W. by N.	0'5	N.W.	0'5	20
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'2	22
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	1'2	23
E.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	E. by N.	0'2	24
—	—	—	—	—	—	—	—	—	—	—	—	25
N.	0'5	N.	0'5	N.	0'5	N.	0'5	N.	0'5	N.	1'0	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	30
W.N.W.	2'0	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	0'5	W.N.W.	0'5	W.N.W.	1'0	31

MARCH.

MARCH.

MARCH.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0°.		1°.		2°.		3°.		4°.		5°.		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	W.N.W.	lbs. 2'0	W.N.W.	lbs. 2'0	W.N.W.	lbs. 1'5	W.N.W.	lbs. 2'5	W.N.W.	lbs. 3'0	W.N.W.	lbs. 3'0
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	0'0	—	0'0	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2
	4	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.W. by S.	0'2	S.W.	0'5	S.W.	0'2
	5	—	0'0	N.	0'2	N. by W.	0'2	N.W.	0'2	N.	0'2	N.E. by N.	1'2
	6	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	—	0'0
	7	N.	0'2	N.	0'2	N.	0'2	N.N.E.	0'2	N.	0'2	N. by W.	0'2
	8	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	0'0	W.	0'2	S.W. by S.	0'2	S.W.	0'2
	11	E. by N.	0'2	E.	0'2	E. by N.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2
	12	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.	0'2
	13	W. by N.	1'5	W.	1'5	W.	1'5	W.S.W.	1'5	W.S.W.	1'5	W.S.W.	1'0
	14	N.W. by N.	0'5	N.W. by N.	0'5	N.	0'5	N.W. by N.	0'5	N.	0'5	N.E. by N.	0'5
	15	N. by W.	0'5	N. by W.	0'2	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	N.W. by N.	0'5
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0'0	N.	0'2	N.N.W.	0'2	N.	0'2	N.W. by W.	0'2	N.	0'2
	18	E.	2'5	E.	2'5	E.	2'5	E. by N.	2'0	E. by N.	2'0	E.N.E.	1'5
	19	N. by E.	0'2	N.N.E.	0'2	N.N.E.	0'5	N. by E.	0'5	N. by E.	0'5	N.N.E.	0'2
	20	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	S.	0'2
	21*	—	—	—	—	—	—	—	—	—	—	—	—
	22	N.N.W.	1'0	W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	—	0'0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	W.N.W.	1'5	W. by N.	1'0	W. by N.	1'0	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0
	25	—	0'0	—	0'0	—	0'0	S. by W.	0'2	S. by W.	0'5	S. by E.	0'5
	26	—	0'0	—	0'0	N.W. by N.	0'2	N.W.	0'2	W. by S.	0'2	S.	0'5
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	—	0'0	W. by N.	2'0	W.N.W.	2'5	W.N.W.	3'0	W.N.W.	3'0	N.W. by W.	3'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
(continued)													
Mean Göttingen Time.	12°.		13°.		14°.		15°.		16°.		17°.		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	W.N.W.	lbs. 0'5	N.W.	lbs. 0'2	N.W.	lbs. 0'2	—	lbs. 0'0	—	lbs. 0'0	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	
	5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	6	N. by W.	1'0	N. by W.	1'0	N.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	9	—	—	—	—	—	—	—	—	—	—	—	
	10	S.W.	0'2	—	0'0	N. by W.	0'2	—	0'0	—	0'0	—	
	11	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N.N.W.	
	12	S.W.	0'2	S.W.	0'2	—	0'0	N.N.E.	0'2	W. by N.	0'2	S.E. by S.	
	13	W.N.W.	1'0	N.W. by N.	0'5	N.N.W.	1'0	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	15	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N.N.W.	
	16	—	—	—	—	—	—	—	—	—	—	—	
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	18	N.E. by E.	0'5	N.E.	1'0	N.E.	0'5	N.E. by E.	1'0	E.N.E.	1'0	N.E. by N.	
	19	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	20	S.W.	1'5	S.W.	0'5	S.W.	0'2	—	0'0	—	0'0	—	
	21*	—	—	—	—	—	—	—	—	—	—	—	
	22	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	
	23	—	—	—	—	—	—	—	—	—	—	—	
	24	W.N.W.	1'0	N.W. by W.	0'5	N.W. by N.	0'2	N.W.	0'2	—	0'0	—	
	25	E. by N.	0'2	S.S.W.	0'2	S.	0'2	S. by W.	0'2	S.W. by W.	0'2	W. by S.	
	26	S.S.E.	0'2	S.	0'2	S.	0'2	S. by W.	0'2	—	0'0	—	
	27	—	0'0	S.S.E.	0'2	S.	0'5	—	0'0	—	0'0	—	
	28	—	0'0	—	0'0	—	0'0	E.	0'2	E. by N.	0'2	E. by N.	
	29	N.W. by W.	2'0	N.W. by W.	1'5	N.W. by W.	0'5	N.W. by W.	0'2	N.W.	0'2	—	
	30	—	—	—	—	—	—	—	—	—	—	—	

* Good Friday.

DIRECTION AND FORCE OF THE WIND

5 ^h .			6 ^h .			7 ^h .			8 ^h .			9 ^h .			10 ^h .			11 ^h .			Mean Getting-on Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.			
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.			
3'0	W.N.W.	3'0	W.N.W.	2'0	W.N.W.	2'0	W.N.W.	1'5	W.N.W.	1'0	N.W.	0'5	W.N.W.	0'5						1	
0'2	E.S.E.	0'2	E.S.E.	0'2	E.	0'2	E. by N.	0'2	E.S.E.	0'2	N. by E.	0'2	—	—	—	—	—	—	—	2	
0'5	S.W.	0'2	S.W.	0'2	S.W. by W.	0'2	—	0'0	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	3	
0'2	N.E. by N.	1'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W. by S.	0'5	S. by W.	0'5	S. by W.	0'5	S. by W.	0'5	S. by W.	4	
0'2	—	0'0	S.	0'2	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'5	N. by W.	5	
0'2	N. by W.	0'2	S.S.W.	0'5	S. by W.	0'5	S. by W.	0'5	S.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	6	
0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	7	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	
0'2	S.W.	0'2	S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W.	0'2	S.W.	0'2	S.W.	0'2	S.W.	0'2	S.W.	9	
0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'5	E. by S.	0'2	E. by N.	0'2	E.	0'2	—	—	—	—	—	—	—	10	
0'2	S.	0'2	S.S.E.	0'2	S.	0'2	S. by E.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	11	
1'5	W.S.W.	1'0	W. by S.	1'0	W.N.W.	2'0	W.N.W.	2'0	W. by N.	2'5	W. by N.	2'5	W. by N.	2'5	W. by N.	1'5	W. by N.	1'5	W. by N.	12	
0'5	N.E. by N.	0'5	N.E. by N.	0'5	S.S.E.	0'2	S.S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	S.W.	13	
0'2	N.W. by N.	0'5	N.	0'5	N.W. by W.	0'5	N.	1'0	N. by W.	1'0	N.	1'0	N. by W.	1'5	N. by W.	1'5	N. by W.	1'5	N. by W.	14	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	
0'2	N.	0'2	N.	0'2	S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	0'2	—	—	—	—	—	—	—	16	
2'0	E.N.E.	1'5	N. by E.	1'5	N.E. by N.	2'5	N.E.	2'0	N.E.	1'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	17	
0'5	N.N.E.	0'2	—	0'0	S.W. by S.	0'2	S. by W.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	18	
0'2	S.	0'2	S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	1'5	S.S.W.	2'5	S.W. by S.	1'0	S.W. by S.	1'0	S.W. by S.	1'0	S.W. by S.	19	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	
0'2	—	0'0	N.W.	0'2	S. by W.	0'2	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.	0'2	S.	0'2	S.	0'2	S.	21	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	
1'0	W.N.W.	1'0	W.N.W.	1'0	W.	2'0	W.	2'5	W.	2'0	W.N.W.	1'0	W. by N.	1'0	W. by N.	1'0	W. by N.	1'0	W. by N.	23	
0'5	S. by E.	0'5	S.E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	24	
0'2	S.	0'5	S.	1'0	S.	0'5	S. by W.	0'5	S.S.E.	0'5	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	25	
0'0	S. by E.	0'2	S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E.	0'2	—	—	—	—	—	—	—	26	
0'0	—	0'0	—	0'0	—	0'0	N.E.	0'2	—	0'0	—	0'0	—	—	—	—	—	—	—	27	
3'0	N.W. by W.	3'0	N.W. by W.	2'5	N.W.	2'0	N.W.	3'0	N.W.	3'0	N.W.	2'5	N.W.	2'0	N.W.	2'0	N.W.	2'0	N.W.	28	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30	

APRIL

18 ^h .	19 ^h .	20 ^h .	21 ^h .	22 ^h .	23 ^h .	Mean Göttingen Time.
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Force.	Direction.	Force.		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
lbs.		lbs.			lbs.		lbs.		lbs.		lbs.		lbs.		
0'0	—	0'0		—	—	—	—	—	—	—	—	—	—	1	
—	—	—		E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'2	2	
0'0	—	0'0		S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	3	
0'5	N. by W.	1'0		N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	4	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5	
0'2	N. by W.	0'2		N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	6	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7	
0'0	—	0'0		—	—	—	—	—	—	—	—	—	—	8	
—	—	—		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10	
0'5	N.N.W.	0'2		N.	0'2	N. by W.	0'5	—	0'0	—	0'0	—	0'0	11	
0'2	S.E. by S.	0'2		N.N.E.	0'2	—	0'0	—	0'0	W.N.W.	1'0	W.N.W.	2'0	12	
0'5	N.W. by N.	0'2		N.W. by N.	0'2	N.N.W.	1'0	N.N.W.	1'5	N.N.W.	0'2	N.N.W.	0'2	13	
0'0	—	0'0		—	0'0	—	0'0	N.W. by N.	0'2	N.N.W.	0'2	N.N.W.	0'2	14	
1'0	N.N.W.	0'5		—	—	—	—	—	—	—	—	—	—	15	
0'0	—	—		N.N.W.	0'5	N. by W.	0'5	N. by W.	0'2	—	0'0	—	0'0	16	
1'0	—	0'0		—	0'0	E.	0'5	E.	1'5	E.	2'0	E. by S.	2'5	17	
0'0	N.E. by N.	1'0		N.N.E.	0'5	N.N.E.	0'2	N.N.E.	0'5	N. by E.	0'5	N. by E.	0'5	18	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19	
0'0	—	—		—	—	—	—	—	—	—	—	—	—	20	
0'2	—	0'0		W.	0'2	W. by N.	0'2	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	21	
—	—	—		—	—	—	—	—	—	—	—	—	—	22	
0'0	—	0'0		W. by N.	2'0	W. by N.	1'5	N.W. by N.	1'5	W.	1'0	W.	1'0	23	
0'2	W. by S.	0'2		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24	
0'0	—	0'0		W. by N.	1'5	N.N.W.	1'5	N.N.W.	0'2	—	0'0	—	0'0	25	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26	
0'0	—	0'0		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27	
0'2	E. by N.	0'2		—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28	
0'2	—	0'0		—	—	—	—	—	—	—	—	—	—	29	
—	—	—		—	0'0	—	0'0	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	30	

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MAY.	1	E.N.E.	0.2	E. by N.	0.2	—	0.0	—	0.0	—	E. by S.	0.2	
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	S.E.	0.2	
	3	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W.	0.2
	4	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.2
	5	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2	S.S.W.	0.2	S. by W.	0.2
	6	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	S. by W.	0.2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	—	0.0	S. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	9	—	0.0	—	0.0	S.W. by W.	0.2	S.W. by S.	0.2	S. by W.	0.2	S.	0.2
	10	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N.	0.2	N.	0.2
	11	N. by E.	0.2	N. by W.	0.2	N.	0.2	N. by W.	1.5	N. by E.	1.5	N. by E.	1.5
	12	N. by W.	0.5	N. by W.	0.5	N. by E.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.N.E.	0.5
	13	—	0.0	—	0.0	S. by W.	0.2	E. by S.	0.2	S.E.	0.5	S.E. by S.	1.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	N.	0.2	—	0.0	W.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.2
	16	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	N.W.	0.2	S.S.W.	0.2
	17	—	0.0	—	0.0	—	0.0	S. by W.	0.2	S. by E.	0.2	S.	0.2
	18	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	19	—	0.0	—	0.0	—	0.0	—	0.0	S.E.	0.2	S.E.	0.2
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.2	—	0.0	S.S.E.	0.2	S.S.E.	0.2
	23	E.	0.2	E. by S.	0.2	—	0.0	E.S.E.	0.2	S.E. by E.	0.5	E.	0.2
	24	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2
	25	—	0.0	—	0.0	S.W. by S.	0.2	S.W.	0.2	S.W. by W.	0.2	S.W. by S.	0.2
	26	—	0.0	—	0.0	N.W. by W.	0.2	N. by W.	0.2	N.W. by N.	0.2	W. by N.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.E.	0.2
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	—	0.0	—	0.0	N. by W.	0.2	N.N.W.	0.5	N.N.W.	1.0	N.N.W.	1.0
	31	N.N.W.	0.5	N.N.W.	1.5	N.	1.0	N. by W.	1.5	N. by W.	1.5	N.	1.5

(continued)

Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MAY.	1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	
	3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	
	4	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	E.	0.2	E.N.E.	0.2	S. by E.	0.2
	5	S. by W.	2.5	S.S.W.	1.0	N.W.	2.0	N.	1.5	S. by E.	1.0	S.S.E.	0.5
	6	E.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2
	9	N. by W.	0.5	N.E.	0.2	N. by E.	0.5	N.	0.5	—	0.0	—	0.0
	10	—	0.0	N.	0.2	N. by E.	0.5	N.	0.5	N. by W.	1.0	N. by E.	0.5
	11	N.W. by N.	0.2	N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	12	N.N.W.	0.5	N. by W.	0.2	N. by W.	0.2	—	0.0	—	0.0	—	0.0
	13	N.N.W.	2.5	N.N.W.	2.0	N.N.W.	2.0	N.N.W.	2.0	N. by W.	3.5	N. by W.	2.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	16	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N.N.E.	0.2
	17	S. by W.	1.0	S.S.W.	1.0	S.W. by S.	0.2	—	0.0	—	0.0	—	0.0
	18	S.	0.2	S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	19	—	0.0	—	0.0	—	0.0	E. by S.	0.2	—	0.0	—	0.0
	20	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	—	0.0	—	0.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	N.N.E.	0.2
	23	E.	1.0	E.	1.5	E.	1.5	E.	1.5	E.	1.5	E.	1.5
	24	S.W.	1.0	S.W. by W.	1.0	S.W. by W.	1.0	S.S.W.	0.2	—	0.0	—	0.0
	25	N.E.	0.2	N. by E.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.5	N. by W.	0.5
	26	N. by E.	0.5	N. by W.	0.5	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	N.W. by W.	2.5	N.W. by N.	2.0	N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	N.W.	0.5
	31	N.N.W.	1.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0

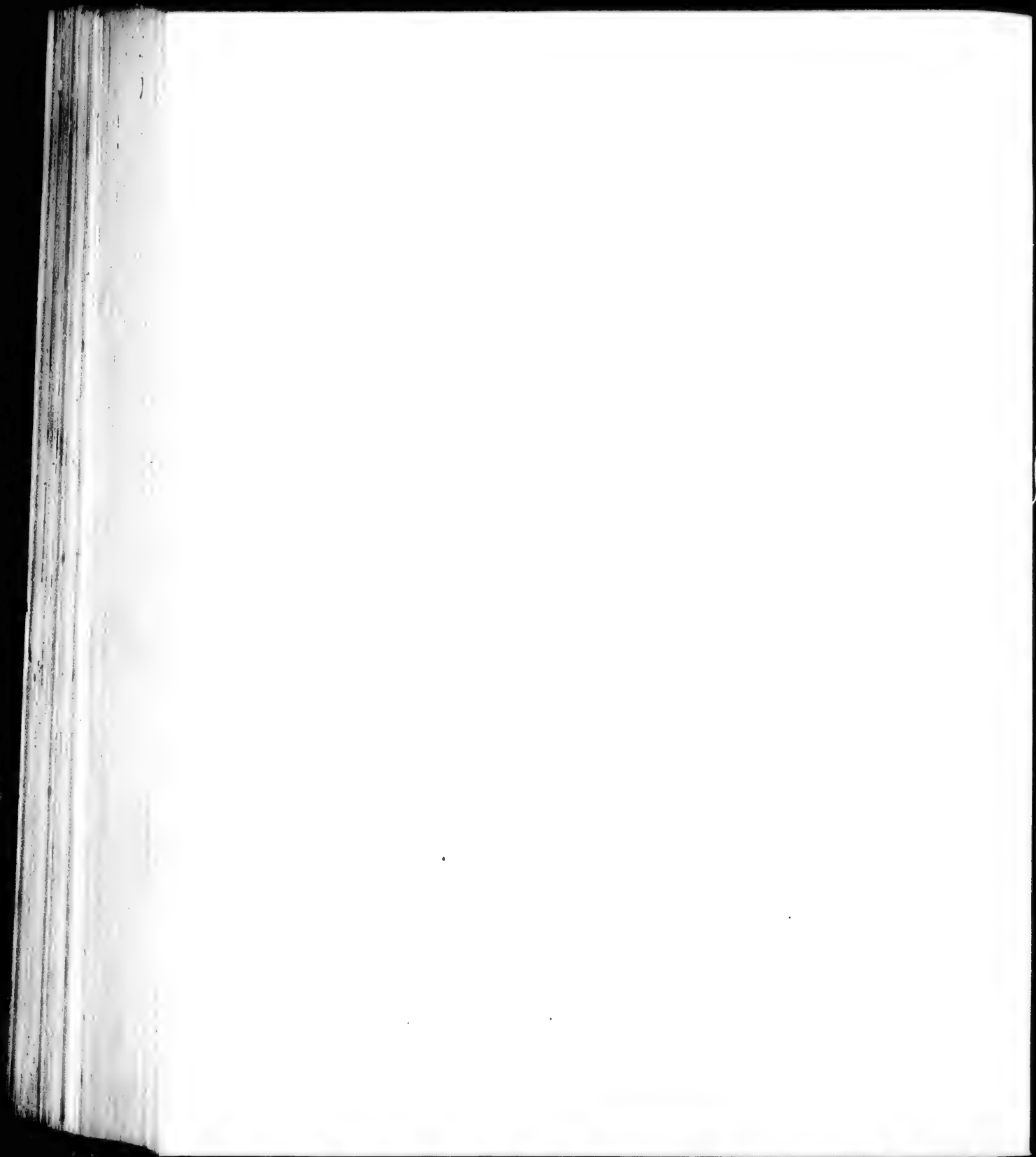
DIRECTION AND FORCE OF THE WIND.															
5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.0	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	1
0.2	S.E.	0.2	S.S.E.	0.2	S.	0.2	S. by E.	0.2	S.	0.2	S.	0.2	—	0.0	2
0.2	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.2	S.S.E.	0.2	S.	0.2	S.E. by E.	0.2	3
0.2	E. by N.	0.2	E. by N.	0.2	N.E. by E.	0.2	E. by N.	0.2	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.2	4
0.2	S. by W.	0.5	S.	0.5	S. by E.	0.5	S.	1.5	S.S.W.	1.0	S. by W.	1.0	S.	2.5	5
0.2	S. by W.	0.2	S. by E.	0.2	S. by E.	0.2	S.E. by S.	0.2	S.S.E.	0.2	E. by S.	0.2	E.	0.2	6
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
0.2	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.2	S. by W.	0.2	S.W. by S.	0.2	S.S.W.	0.2	8
0.2	S.	0.2	S.	0.2	S.	0.2	S.	0.2	S. by W.	2.0	S.	1.5	S.S.E.	0.2	9
0.2	N.	0.2	N.	0.2	N. by W.	0.2	S.E.	0.2	S.E.	0.2	—	0.0	—	0.0	10
1.5	N. by E.	1.5	N. by E.	1.0	N.N.E.	1.0	N. by W.	1.0	N. by W.	1.0	N.N.E.	0.5	N. by W.	0.2	11
0.5	N.N.E.	0.5	N. by W.	0.5	N. by W.	1.0	N.	1.0	N. by W.	1.0	N. by W.	1.0	N.N.W.	0.5	12
0.5	S.E. by S.	1.0	S. by W.	0.5	W.	1.0	N.W. by N.	1.5	N.W. by W.	2.0	N.W.	2.5	N.N.W.	2.0	13
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14
0.2	S.	0.2	S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	S.E.	0.2	E.	0.2	15
0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.S.W.	0.2	S.S.W.	0.2	—	0.0	—	0.0	16
0.2	S.	0.2	S.E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	S. by E.	0.2	S.	0.5	S. by W.	1.5	17
0.2	S.S.W.	0.2	S. by W.	0.2	S.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.	0.2	18
0.2	S.E.	0.2	E.S.E.	0.2	S.E.	0.2	N.W.	0.2	S.S.W.	0.2	N. by W.	0.2	—	0.0	19
0.0	S.S.W.	0.2	S.	0.2	—	0.0	—	0.0	S. by E.	0.2	—	0.0	—	0.0	20
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21
0.2	S.S.E.	0.2	S. by E.	0.2	S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	—	0.0	22
0.5	E.	0.2	E.	0.2	N.E. by E.	0.2	E. by N.	0.5	E.N.E.	0.5	E. by S.	0.5	E.	1.0	23
0.0	S.W. by S.	0.2	W.	0.5	W.S.W.	1.5	W.	1.5	W.S.W.	1.0	W. by N.	1.0	S.W. by S.	0.5	24
0.2	S.W. by S.	0.2	S. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2	W.	0.2	W.	2.0	N. by E.	1.0	25
0.2	W. by N.	0.2	N.W. by N.	0.2	S.	0.2	S.	0.2	N.	0.2	N.	1.0	N.	0.5	26
0.0	S.S.E.	0.2	S. by W.	0.2	S. by E.	0.2	S. by E.	0.2	E. by S.	0.2	S.E.	0.2	S. by E.	0.2	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
0.0	—	0.0	S.W.	0.2	S.W.	0.2	S.W. by S.	0.2	S.W. by W.	0.5	W.N.W.	0.2	W. by N.	0.2	29
1.0	N.N.W.	1.0	N.	0.5	W.N.W.	1.5	N.W. by W.	2.5	N.W. by W.	3.0	N.W. by W.	3.0	N.W. by W.	3.0	30
1.5	N.	1.5	N. by W.	1.5	N. by W.	2.5	N. by W.	3.0	N.	3.0	N.	2.5	N.	1.5	31

DIRECTION AND FORCE OF THE WIND.															
17 ^h .			18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1
0.0	—	0.0	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	2
0.0	S. by E.	0.2	E.N.E.	0.2	W.N.W.	0.2	N. by E.	0.2	N. by E.	0.2	S.W.	0.2	—	0.0	3
0.2	E. by N.	0.2	E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	4
1.0	S.S.E.	0.5	S.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
0.2	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7
0.0	N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
1.0	N. by E.	0.5	N. by E.	0.5	N. by E.	0.2	N.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	10
0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	11
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
3.5	N. by W.	2.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	14
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
0.2	N.N.E.	0.2	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
—	—	—	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	21
0.2	N.N.E.	0.2	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
1.5	E.	1.5	E.	1.0	N. by E.	1.0	E. by N.	0.2	N.N.E.	0.2	E.N.E.	0.2	—	0.0	23
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24
0.5	N. by W.	0.5	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25
0.2	N. by W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by E.	0.2	N. by E.	0.2	N.	0.2	26
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29
0.2	N.W.	0.5	N.N.W.	0.5	N.N.W.	1.0	N. by W.	1.5	N.N.W.	0.5	N.N.W.	0.5	N.W. by N.	0.2	30
0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	—	0.0	—	0.0	N.N.W.	0.2	31

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 ^h .		1 ^h .		2 ^h .		3 ^h .		4 ^h .		5 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	N.N.W.	lbs. 0'2	N.N.W.	lbs. 0'2	W. by S.	lbs. 0'2	W.N.W.	lbs. 0'2	N.W.	lbs. 1'0	N.W. by N.	lbs. 1'0
	2	—	0'0	—	0'0	—	0'0	S.	0'2	S.	0'2	S.	0'2
	3	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W.	0'2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0'0	—	0'0	—	0'0	S.W. by S.	0'5	S.	0'5	S.	0'2
	6	W.	0'5	N.W. by W.	0'5	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	1'5	N.N.W.	1'5
	7	N. by W.	0'2	N.N.W.	0'5	N.N.W.	1'0	N.N.W.	0'5	N.W. by N.	0'5	E. by N.	0'5
	8	N.	0'2	N.	0'2	N.	0'2	N.	0'2	S.	0'2	S.	0'2
	9	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2
	10	—	0'0	—	0'0	W.S.W.	0'2	S.W. by S.	0'2	S. by W.	0'2	S.S.E.	0'2
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N. by W.	0'2	N.	0'5	N.N.W.	0'5	N.N.W.	1'0	N. by W.	1'0	N.N.W.	1'0
	13	N. by W.	0'2	N. by W.	1'0	N.	1'0	N.W. by N.	0'5	N.N.W.	1'0	N.N.W.	1'0
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.S.W.	0'2
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	16	W. by S.	0'2	W.	0'5	W.N.W.	0'5	W.	0'5	W. by S.	0'5	S. by W.	0'5
	17	—	0'0	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S. by W.	0'2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0'0	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	S.S.E.	0'2
	20	—	0'0	—	0'0	S.S.W.	0'2	S. by W.	0'2	S.S.E.	0'2	S. by E.	0'5
	21	—	0'0	—	0'0	S.W. by S.	0'2	S.S.W.	0'2	N.W.	0'2	W.	0'2
	22	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	S.S.E.	0'2	S.E. by E.	0'2
	23	E. by N.	0'2	—	0'0	E.	0'2	S.	0'2	S.S.W.	0'2	S.S.W.	0'2
	24	W. by S.	0'2	W.	0'2	W.	0'5	W. by N.	1'0	W.N.W.	1'0	W.N.W.	1'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	S.	0'2
	27	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.	0'2	S. by W.	0'5
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	—	0'0	N.N.W.	0'2	E.N.E.	0'2	S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2
	30	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.E. by S.	0'2
(continued)													
Mean Göttingen Time.	12 ^h .		13 ^h .		14 ^h .		15 ^h .		16 ^h .		17 ^h .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	
	2	S.W. by W.	0'5	S.W. by W.	0'2	—	0'0	—	0'0	—	0'0	—	
	3	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	—	—	—	—	—	—	—	—	—	—	—	
	5	N.W.	0'5	N.W. by N.	0'5	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	N.W.	0'2
	6	N.	1'5	N.	1'0	N.	0'2	—	0'0	—	0'0	—	0'0
	7	N. by W.	0'5	N. by W.	0'5	N. by W.	0'5	N.N.W.	0'5	N. by W.	0'5	N. by W.	0'5
	8	E. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	9	—	0'0	—	0'0	N.N.W.	0'2	N.	0'2	N. by W.	0'2	N. by W.	0'2
	10	—	0'0	N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N.N.W.	1'0	N.W.	1'0	N.W.	0'2	—	0'0	—	0'0	N.W.	0'2
	13	N.	1'0	N.	1'0	N.	0'5	N. by W.	0'2	—	0'0	—	0'0
	14	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2
	15	W. by N.	0'5	W.	0'5	S.W. by W.	0'5	—	0'0	—	0'0	—	0'0
	16	W. by N.	0'5	W.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	17	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	—	0'0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	W. by N.	0'2
	20	S. by W.	0'2	N.W.	0'2	S.W.	0'2	N.W. by W.	0'2	E.S.E.	0'2	S.S.W.	0'2
	21	W.N.W.	0'5	W.N.W.	0'5	W.N.W.	0'2	—	0'0	—	0'0	—	0'0
	22	E. by N.	0'2	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	23	W.N.W.	2'0	N.W. by W.	1'5	W.	1'0	W.	1'0	W.	0'5	W.	0'2
	24	W.N.W.	0'5	W.N.W.	0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	S.W. by S.	0'5	S.W. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	27	S.W.	0'5	W.	0'2	W. by S.	0'2	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	0'2	—	0'0
	29	—	0'0	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	—	0'0
	30	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	S.W. by W.	0'2	W.	0'2

DIRECTION AND FORCE OF THE WIND.															
5 ^h .			6 ^h .		7 ^h .		8 ^h .		9 ^h .		10 ^h .		11 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
1'0	N.W. by N.	1'0	N. by W.	1'0	N.N.W.	1'0	N.W.	1'0	S. by W.	0'2	S.	0'2	—	0'0	1
0'2	S.	0'2	S.S.W.	0'2	S. by W.	1'0	S. by W.	1'5	S. by W.	2'0	S.S.W.	1'5	S.W.	1'0	2
0'2	S.W.	0'2	S.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	0'5	S.W.	0'5	S.W. by S.	0'2	3
0'5	S.	0'2	S.E. by S.	0'2	S.	0'5	S.W.	0'5	S.	0'5	S. by W.	0'2	S.	0'2	4
1'5	N.N.W.	1'5	N.N.W.	1'5	N.W.	1'0	N.N.W.	1'0	N.N.W.	0'5	N.	0'5	N.	2'0	5
0'5	E. by N.	0'5	N.W.	0'2	N.W.	1'0	N.W.	1'0	N.N.W.	1'0	N.N.W.	1'0	N.	1'0	6
0'2	S.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.	0'2	—	0'0	—	0'0	7
0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	8
0'2	S.S.E.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W. by S.	0'2	9
1'0	N.N.W.	1'0	N.W. by N.	1'5	N.W.	2'0	N.W.	1'5	N.W. by N.	1'0	N.W. by N.	1'0	N.N.W.	1'0	10
1'0	N.N.W.	1'0	N.W.	1'5	N.N.W.	2'0	N.W.	2'5	N.N.W.	2'0	N.N.W.	2'0	N.	1'0	11
0'0	S.S.W.	0'2	S.W. by S.	0'5	S.S.W.	0'2	—	0'0	S.S.E.	0'2	E.S.E.	0'2	—	0'0	12
0'5	—	0'0	N.W. by W.	1'0	W. by N.	1'0	W.N.W.	0'5	W.	1'0	W. by N.	1'0	W.N.W.	0'5	13
0'2	S. by W.	0'5	W. by N.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by S.	0'5	S.W. by S.	0'2	—	0'0	14
0'2	S. by W.	0'2	S.S.E.	0'2	S.W.	0'2	—	0'0	—	0'0	S.E. by E.	0'2	—	0'0	15
0'2	S.S.E.	0'2	—	0'0	—	0'0	E.S.E.	0'2	S.E.	0'2	S.S.E.	0'2	—	0'0	16
0'2	S. by E.	0'5	S.W.	0'2	E. by N.	0'2	E.S.E.	0'2	E.S.E.	0'2	S.E. by E.	0'2	W. by N.	2'5	17
0'2	W.	0'2	W. by N.	0'5	W.N.W.	0'5	W.N.W.	1'0	N.W. by W.	0'2	W.N.W.	0'2	W.N.W.	0'2	18
0'2	S.E. by E.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E. by N.	0'2	19
0'2	S.S.W.	0'2	S.S.W.	1'5	S.S.W.	1'5	W.S.W.	3'5	W. by S.	4'0	W. by S.	2'5	W. by N.	3'0	20
1'0	W.N.W.	1'0	W.N.W.	1'5	W. by S.	1'5	W.	1'5	W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	21
0'2	S.	0'2	S.	0'2	S.E.	0'2	S.E. by E.	0'2	S.E.	0'2	S.E.	0'2	S. by E.	0'5	22
0'2	S. by W.	0'5	S. by W.	0'5	S.S.W.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	1'0	S.W. by W.	1'0	23
0'0	—	0'0	—	0'0	N.N.W.	0'2	N.	0'2	N.	0'2	N.N.W.	0'2	N.N.W.	0'2	24
0'2	S.S.E.	0'2	S.	0'2	S.	0'2	S.	0'2	S.S.E.	0'2	—	0'0	—	0'0	25
0'2	S.E. by S.	0'2	E. by S.	0'2	S.E.	0'2	E. by S.	0'2	S.E.	0'2	S.E. by E.	0'5	S.E. by E.	0'2	26

DIRECTION AND FORCE OF THE WIND.															
17 ^h .			18 ^h .		19 ^h .		20 ^h .		21 ^h .		22 ^h .		23 ^h .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
0'0	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	3
0'2	N.W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
0'0	—	0'0	N.W.	0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	5
0'5	N. by W.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
0'0	—	0'0	N.	0'5	N.	0'2	N.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2	7
0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
0'0	—	0'0	N.	0'2	N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	9
0'0	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	10
0'0	N.W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	11
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
0'2	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
0'0	W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
0'2	S.S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
0'5	W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	—	0'0	23
0'0	—	0'0	—	—	—	—	—	—	—	—	—	—	—	—	24
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
0'2	W.	0'2	W.N.W.	1'0	—	0'0	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W. by W.	0'2	30



TORONTO, 1846 to 1848.

METEOROLOGICAL JOURNAL.

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D.	JANUARY.							In
1	Clouded all day; cir. cir-strat. and haze; snow, sleet, and rain	1'0	1'0	1'0	1'0	29'0	9'5	0'25
2	Clouded all day; cir-cum. and haze; rain and snow till 13 ^h , when it ceased	1'0	1'0	1'0	1'0	38'7	28'7	0'45
3	Cloudy all day; cir-cum. and haze; occasional rain	0'9	1'0	—	—	38'2	28'5	—
4	In general clouded; cir-cum. and haze; halo round the moon at 10 ^h , imperfect	—	—	0'5	0'9	36'0	28'2	—
5	In general clouded, with cir-cum. and haze, except from 13 ^h to 15 ^h , when it was clear	0'8	1'0	0'0	1'0	36'2	26'7	—
6	Clouded all day; cir-cum. and haze; snow and rain mixed from 8 ^h to 17 ^h	1'0	1'0	1'0	1'0	36'2	23'0	0'18
7	Clouded all day; dense haze; slight rain till 12 ^h ; snow at 16 ^h and 17 ^h	1'0	1'0	1'0	1'0	34'9	27'7	0'13
8	Clouded all day; cir-cum. and haze; slight snow occasionally; clouded at 21 ^h	1'0	1'0	1'0	0'2	36'4	33'2	0'18
9	Partially clouded to 1 ^h ; cir-cum. cir-strat. and haze	1'0	1'0	1'0	1'0	33'8	28'0	—
10	Cloudy; cir-cum. cir-strat. and haze; occasional snow	1'0	1'0	—	—	30'4	26'1	—
11	Clouded all day; cir-cum. cir-strat. and haze; some slight snow	—	—	1'0	1'0	31'6	23'7	—
12	Clouded till 8 ^h ; cir-cum.; cir-strat.; remainder of the day clear	1'0	0'3	0'3	1'0	32'5	24'9	—
13	Generally clouded; cir-cum. cir-strat. and haze; clear intervals occasionally; imperfect halo round the moon at 10 ^h , diameter 40 ^o	1'0	0'3	1'0	1'0	27'7	9'0	—
14	Clouded till 4 ^h ; cir-cum. cir-strat. and haze; remainder clear; slight snow from 19 ^h to 22 ^h	1'0	0'0	0'0	0'0	29'5	9'7	—
15	Clear till 2 ^h ; remainder of the day clouded; cir-cum. cir-strat. and haze	0'4	0'8	1'0	1'0	35'2	18'1	—
16	Generally clouded; cir-cum. cir-strat. and haze; halo round the moon at 11 ^h and 15 ^h , imperfect	1'0	0'6	1'0	1'0	40'4	18'4	—
17	Generally clouded; cir-cum. cir-strat. and haze	1'0	0'3	—	—	31'7	11'2	—
18	Clear at 10 ^h and 11 ^h ; remainder of the day clouded; cir-cum. and cir-strat.; clouded at 18 ^h & 19 ^h	—	—	1'0	0'2	42'7	—1'2	—
19	Clouded at 13 ^h to 17 ^h ; cir-cum. cir-strat. and haze; remainder clear	0'1	0'0	1'0	1'0	20'9	0'9	—
20	Clouded all day; cir-cum. cir-strat. and haze	1'0	1'0	1'0	1'0	17'7	5'5	—
21	Clouded till 4 ^h ; cir-cum. and haze; remainder clear; snow from 21 ^h to 23 ^h	1'0	0'0	0'0	0'0	25'2	9'5	—
22	Snow from 1 ^h to 4 ^h ; afterwards clear	0'0	0'0	0'0	0'1	27'9	1'1	—
23	Clear till 14 ^h ; remainder clouded; cir-strat. and haze	0'0	0'0	1'0	0'7	20'1	—1'3	—
24	Cloudy; cir-strat. and haze; clouded from 18 ^h to 23 ^h	0'2	0'0	—	—	23'2	5'9	—
25	Clouded from 12 ^h to 17 ^h ; cir-strat. and haze; remainder clear; rain from 16 ^h to 17 ^h	—	—	1'0	1'0	37'0	19'6	—
26	Clouded till 13 ^h ; cir-cum. and haze; misty; remainder clear; slight rain and snow occasionally	1'0	1'0	0'0	0'2	44'0	31'7	0'26
27	Generally clear till 6 ^h ; remainder overcast with dense haze	0'2	1'0	0'9	1'0	37'3	17'7	—
28	Clouded all day; cir-cum. and haze	1'0	1'0	1'0	1'0	31'7	15'5	—
29	Clouded all day; cir-cum. and haze; slight rain from 2 ^h to 5 ^h , and from 15 ^h to 20 ^h	1'0	1'0	1'0	1'0	38'0	31'5	0'25
30	Clouded all day; cir-cum. and haze; slight rain from 18 ^h to 20 ^h	1'0	1'0	1'0	0'6	37'7	33'2	0'33
31	Clouded at 9 ^h and 10 ^h , and from 18 ^h to 21 ^h ; clear from 22 ^h to 23 ^h	0'2	0'0	—	—	42'0	17'0	—
	FEBRUARY.							
1	Clouded all day; cir-cum. cir-strat. and haze	1'0	1'0	1'0	1'0	22'2	8'3	—
2	Clouded; cir-cum. and cir-strat.; lunar halo at 7 ^h and 8 ^h , diameter 30 ^o , perfect	1'0	1'0	0'4	0'3	32'5	22'5	—
3	Clouded till 11 ^h ; cir. cir-strat. cir-cum. and haze; clear	1'0	1'0	0'0	0'4	41'9	28'7	—
4	Clouded till 11 ^h ; cir-cum. and cum-strat.; clear	1'0	0'7	0'2	0'0	40'1	28'1	—
5	Clouded at 4 ^h , 9 ^h , and 10 ^h ; cir-cum. and haze; clear	0'7	1'0	0'4	0'1	40'0	23'0	—
6	Clouded at 7 ^h , 12 ^h , and 17 ^h ; cir-cum. cir-strat. and haze; clear	1'0	0'0	—	—	39'2	23'6	—
7	Clear, except light cir. and strat.; halo round the moon at 12 ^h , diameter 40 ^o , perfect	0'0	0'3	0'0	1'0	20'9	10'3	—
8	Clouded; cir-cum. and haze; snowing slightly all day	1'0	1'0	1'0	1'0	16'5	4'2	—
9	Clouded till 14 ^h ; cir-cum. and haze; snowing from 18 ^h to 23 ^h	1'0	1'0	0'0	0'2	28'0	4'6	—
10	Clear till 19 ^h , afterwards clouded; cir-cum. and haze	0'6	1'0	1'0	1'0	23'7	—3'4	—
11	Clouded; cir-cum. and haze; halo round the moon at 16 ^h and 17 ^h , diameter 40 ^o , perfect	0'9	1'0	0'8	1'0	24'4	—7'0	—
12	Clouded; cir-cum. cir-strat. and haze; snow commences at 4 ^h and continues all night	1'0	1'0	—	—	35'2	12'8	—
13	Overcast; cir-cum. cir-strat. and haze; slight snow from 0 ^h to 10 ^h	1'0	1'0	1'0	1'0	25'3	13'2	—
14	Clouded; cir-cum. cum-strat.; slight fall of snow from 2 ^h to 12 ^h	1'0	1'0	0'1	0'8	27'7	18'9	—
15	Partially clouded; cir-cum. cum-strat.; after part of day clear	0'0	0'0	0'0	1'0	30'9	4'0	—
16	Clouded; cir-cum. cir-strat. and haze; halo round the sun at 21 ^h and 23 ^h , diameter 30 ^o	1'0	1'0	1'0	1'0	27'2	—5'4	—
17	Clouded; cir-cum. and haze; snowing most part of the day	1'0	1'0	1'0	0'4	29'6	—7'0	—
18	Clear from 9 ^h to 12 ^h ; overcast from 18 ^h to 23 ^h	1'0	1'0	0'0	—	29'8	22'7	—
19	Overcast from 0 ^h to 3 ^h ; cir-strat. cir-cum. and haze; clouded from 20 ^h to 23 ^h	0'2	1'0	0'0	0'0	26'9	13'1	—
20	Clouded at 12 ^h ; cir-cum. cir. and haze; snow squalls	1'0	0'8	0'0	0'0	27'0	10'1	—
21	Clouded from 9 ^h to 14 ^h ; cir-cum. cir-strat. and haze; snowing slightly	1'0	1'0	0'0	0'0	21'2	0'2	—
22	Generally clear; light cir-cum. dispersed from 18 ^h to 23 ^h	0'2	0'4	0'0	0'0	17'8	—11'7	—
23	Clouded; cir-cum. and haze; occasionally slight snow	1'0	1'0	1'0	1'0	10'9	—16'4	—
24	Clouded till 11 ^h ; cir-strat. and haze; slight fall of snow	1'0	1'0	1'0	—	17'8	—16'7	—
Mar. 1		—	—	—	0'0	—	—	—

* Taken from the lowest reading of the Standard Thermometer.

Y.	Max. Therm.	Min. Therm.	Rain.
21			In.
1.0	29.0	9.5	0.24
1.0	38.7	28.7	0.43
—	38.2	28.5	—
0.9	36.0	28.2	—
1.0	36.2	26.7	—
1.0	36.2	23.0	0.18
1.0	34.9	27.7	0.13
0.2	36.4	33.2	0.18
1.0	33.8	28.0	—
—	30.4	26.1	—
1.0	31.6	23.7	—
1.0	32.5	24.9	—
1.0	27.7	9.0	—
0.0	29.5	9.7	—
1.0	35.2	18.1	—
1.0	40.4	18.4	—
—	31.7	11.2	—
0.2	12.7	—1.2	—
1.0	20.9	0.9	—
1.0	17.7	5.5	—
0.0	25.2	9.5	—
0.1	27.9	1.1	—
0.7	20.1	—1.3	—
—	23.2	5.9	—
1.0	37.0	19.6	—
0.2	44.0	31.7	0.26
1.0	37.3	17.7	—
1.0	31.7	15.5	—
1.0	38.0	31.5	0.25
0.6	37.7	33.2	0.33
—	42.0	17.0	—
—	20.9	8.3	—
1.0	22.2	9.1	—
0.3	32.5	22.5	—
0.4	41.9	28.7	—
0.0	40.1	28.1	—
0.1	40.0	23.0	—
—	39.2	23.6	—
1.2	40.0	11.0	—
1.0	20.9	10.3	—
1.0	16.5	4.2	—
0.2	28.0	4.6	—
1.0	23.7	—3.4	—
1.0	24.4	—7.0	—
—	35.2	12.8	—
1.0	34.4	15.5	—
1.0	25.3	13.2	—
0.8	27.7	18.9	—
1.0	30.9	4.0	—
1.0	27.2	—5.4	—
0.4	29.6	—7.0	—
—	29.8	22.7	—
1.0	32.9	13.3	—
0.0	26.9	13.1	—
0.0	27.0	10.1	—
0.0	21.2	0.2	—
0.0	17.8	—11.7	—
1.0	10.9	—16.4	—
—	17.8	—16.7	—
0.0	—	—	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MARCH.								
1	Partially clouded till 7 ^h ; cir., cir.-strat., and haze; afterwards clear	0.2	0.0	0.0	0.1	20.7	10.0	—
2	Clouded from 2 ^h to 10 ^h ; cir., cir.-strat., and haze; clear; halo round the moon, diameter 40"	0.5	0.7	0.0	0.8	27.4	8.3	—
3	Clouded from 21 ^h to 23 ^h ; cum.-strat., cir.-cum., and cir.-strat.	0.4	0.0	0.3	0.2	30.4	9.3	—
4	Nearly clear till 8 ^h , then clouded; cir.-cum., cir.-strat., and haze	0.1	1.0	1.0	1.0	38.9	14.6	—
5	Clouded till 3 ^h ; cir.-cum., cir.-strat., and haze; cleared up	1.0	0.0	0.3	1.0	43.9	26.9	—
6	Clouded; cir.-cum. and haze; snow from 0 ^h to 3 ^h	1.0	1.0	—	—	31.0	8.8	—
7	Clear till 5 ^h ; clouded; cir.-cum., cir.-strat., and haze	0.0	1.0	1.0	0.7	31.2	10.8	—
8	Clear, except light cir.-strat. round horizon	0.0	0.0	0.2	0.3	38.1	28.3	—
9	Clear till 6 ^h ; clouded; cir.-cum., cir.-strat., and haze; halo round the moon from 9 ^h to 15 ^h ; diameter 30"	0.0	1.0	1.0	1.0	40.8	24.7	—
10	Clouded; cir.-cum., cum.-strat., cir.-strat., and haze; slight rain at 2 ^h , 3 ^h , and from 12 ^h to 17 ^h	1.0	1.0	1.0	1.0	40.7	28.8	0.18
11	Clouded; cir.-cum. and haze; rain; mist rising from the ground	1.0	1.0	1.0	1.0	44.1	33.0	0.77
12	Clouded; cir.-cum. and haze; slight snow from 4 ^h to 9 ^h	1.0	1.0	—	—	45.4	34.2	—
13	Clouded till 3 ^h ; cir.-cum., cum.-strat., and haze; clear	0.9	0.0	0.0	1.0	38.9	28.4	—
14	Clouded; cir.-cum., cum.-strat., and haze; faint streamers in N. at 9 ^h	0.0	0.0	0.0	1.0	35.2	22.8	—
15	Clouded all day; cir.-cum., cum.-strat., and haze	0.8	1.0	1.0	1.0	36.4	20.4	—
16	Clouded at 6 ^h , 13 ^h , 15 ^h , and 17 ^h ; cir.-cum., cir.-strat., and haze; halo round the sun at 1 ^h ; diameter 35"	1.0	0.0	1.0	1.0	40.7	20.8	—
17	Clouded; cir.-cum., cir.-strat., and haze; halo round the sun, diameter 30"; rain from 7 ^h to 9 ^h	0.9	1.0	1.0	1.0	49.6	27.7	—
18	Clouded; cum.-strat. and cir.-cum.; clear	0.0	0.0	—	—	48.1	27.2	—
19	Clouded; cir.-cum., cir.-strat., and haze; rain from 5 ^h to 11 ^h ; solar halo, diameter 30"	—	—	0.4	0.2	38.4	24.1	—
20	Clouded; cir.-cum. and haze; rain	1.0	1.0	1.0	1.0	40.9	24.2	0.08
21	Clouded; cir.-cum. and haze; rain	1.0	1.0	1.0	1.0	44.7	34.1	0.33
22	Clouded; cir.-cum., cir.-cum., and haze; rain	1.0	1.0	1.0	0.4	40.7	37.3	0.57
23	Clouded; cum.-strat., cir.-cum., and haze; rain	1.0	1.0	1.0	0.7	41.7	35.2	—
24	Clouded; cir.-cum. and haze; rain from 5 ^h to 8 ^h	1.0	0.0	0.8	1.0	47.4	35.3	0.06
25	Clouded; cir.-cum. and haze; snow from 18 ^h to 23 ^h	1.0	1.0	—	—	45.1	33.8	—
26	Clouded; cum.; cir.-cum.; slight fall of snow	—	—	1.0	0.5	41.9	31.7	—
27	Clouded; cir.-cum.; cum.-strat.; clear	1.0	0.4	0.8	0.4	39.6	19.7	—
28		1.0	0.0	0.0	0.0	40.4	28.2	—
APRIL.								
1	Clear all day	0.0	0.0	0.0	0.0	43.9	26.7	—
2	Clear all day	0.0	0.0	0.0	0.0	43.1	25.7	—
3	Clear all day	0.0	0.0	0.0	0.5	43.0	29.5	—
4	Clear till 7 ^h ; clouded; cir.-strat. and haze; halo round the moon at 8 ^h and 9 ^h , diameter 35"; rain at intervals	0.0	1.0	—	—	46.3	30.5	—
5	Clouded; cir.-cum., cir.-strat., and haze; lunar halo at 10 ^h , diameter 35", imperfect	1.0	1.0	1.0	1.0	50.4	31.7	0.19
6	Clouded all day; cir.-cum., cir.-strat., and haze; rain till 8 ^h	1.0	1.0	1.0	0.6	54.3	41.1	—
7	Mostly clear; a few cir.-cum. dispersed	0.1	0.0	0.4	0.7	52.5	42.7	0.06
8	Generally clouded; cir.-cum., strat., and haze; lunar halo at 10 ^h , diameter 45", perfect; rain	1.0	0.5	—	—	56.1	33.4	—
9	Clouded all day; cir.-cum. and haze	—	—	1.0	1.0	43.2	24.2	—
10	Clouded till 6 ^h ; cum.-strat. and cir.-cum.; clear; solar halo, diameter 35"	1.0	0.9	—	—	49.1	36.1	—
11	Clouded; cir.-cum. and cir.-strat.; slight rain from 6 ^h to 11 ^h	—	—	1.0	0.9	43.8	35.9	0.16
12	Clear all day	0.4	0.0	0.4	0.2	56.0	31.2	—
13	Clear all day	1.0	1.0	0.3	0.0	36.6	24.4	—
14	Clouded from 3 ^h to 13 ^h ; cir.-strat. and haze; clear	0.0	0.0	0.0	0.2	39.3	26.9	—
15	Clouded till 14 ^h ; clouded; cir.-strat. and haze	1.0	1.0	0.4	0.0	45.4	29.4	—
16	Clear and clouded alternately; cir.-cum. and cum.-strat.; auroral light in N. at 12 ^h	0.0	0.0	1.0	1.0	45.7	24.3	—
17	Clouded from 6 ^h to 9 ^h ; cir. and haze; clear	0.3	1.0	—	—	47.0	33.0	—
18	Clear to 1 ^h ; clouded; cir.-cum., cum.-strat., and haze; rain from 5 ^h to 10 ^h	—	—	0.2	0.0	58.0	39.5	—
19	Clouded all day; cir.-cum., cir.-strat., and haze; rain ceased	—	—	0.0	0.0	58.1	40.2	—
20	Clouded till 11 ^h ; cir.-cum., cir.-strat., and haze; quite clear	0.0	0.6	0.0	0.0	55.5	29.2	—
21	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 5 ^h to 10 ^h	1.0	1.0	1.0	1.0	62.8	41.8	0.06
22	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 13 ^h to 17 ^h	1.0	1.0	1.0	1.0	81.8	42.2	—
23	Clouded all day; cir.-cum., cir.-strat., and haze; rain ceased	1.0	1.0	1.0	1.0	52.8	43.7	0.07
24	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain till 6 ^h	1.0	1.0	0.8	1.0	56.6	50.0	0.16
25	Clouded till 11 ^h ; cir.-cum., cir.-strat., and haze; quite clear	—	—	1.0	1.0	56.5	40.7	—
26	Clear	—	—	0.0	0.0	46.2	41.0	—
27	Clouded; cir.-strat., cir.-cum., and haze; rain from 10 ^h to 16 ^h	0.0	0.0	0.0	1.0	54.6	36.2	—
28	Clouded; cir.-strat. and haze; drizzling rain from 5 ^h to 11 ^h	1.0	1.0	1.0	1.0	59.8	36.5	0.61
29	Clouded; cir.-cum., cir.-strat., and haze; misty	1.0	1.0	1.0	1.0	61.0	44.5	—
30	Clouded; cir.-cum., cir.-strat., and haze; misty	1.0	1.0	0.7	1.0	51.6	46.5	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MAY.								
D.								In.
1	Clouded all day: cir.-cum., cir.-strat., and haze; rain from 0 ^h to 15 ^h -	1'0	1'0	1'0	1'0	59'0	50'8	0'12
2	Clouded; cir.-cum., cum.-strat., and haze; auroral light at 12 ^h -	0'4	0'2	—	—	58'0	51'0	—
3	Clouded; cir.-cum., cum.-strat., and haze; auroral light at 12 ^h -	—	—	0'4	0	63'0	42'7	—
4	Clouded; cir.-strat. and haze; solar halo; lunar halo at 9 ^h , diameter 40'; auroral light in N. from 9 ^h to 11 ^h -	0'4	0'4	0'0	1'0	64'0	39'8	—
5	Clouded; cir.-cum., cir.-strat., and haze; squall, lasting only a few minutes -	1'0	1'0	1'0	0'4	67'6	40'0	—
6	Clear -	0'0	0'0	0'0	1'0	61'8	51'0	—
7	Clouded; cir., cir.-cum., and haze till 10 ^h ; afterwards clear -	1'0	0'7	0'3	1'0	57'5	41'3	—
8	Clouded; cir.-cum., cir.-strat., and haze; rain from 9 ^h to 17 ^h ; solar halo, diameter 35%; perfect and very bright -	1'0	1'0	1'0	1'0	57'8	47'8	0'12
9	Clouded; cir.-cum. and haze; rain -	1'0	1'0	—	—	62'4	53'9	1'42
10	Clouded; cir.-cum. and cir.-strat.; clear; auroral light at 10 ^h -	0'2	0'3	1'0	0'2	57'6	33'8	—
11	Clear; clouded at 15 ^h , 16 ^h , and 17 ^h , with cir.-cum. and haze -	0'1	0'2	1'0	1'0	48'5	40'0	—
12	Clouded; cir.-cum. and haze; showers of rain -	1'0	1'0	1'0	0'9	64'0	38'6	0'04
13	Clouded; cir.-cum., cir.-strat., and haze; rain from 13 ^h to 17 ^h -	1'0	1'0	1'0	1'0	71'7	51'0	0'26
14	Clouded; cir.-cum. and cum.-strat.; rain -	0'8	0'4	1'0	0'8	70'5	49'8	1'07
15	Clear; clouded; cir.-cum. and haze; rain -	0'6	0'0	—	—	62'8	44'7	—
16	Clouded; after part clear -	0'0	0'0	0'0	0'0	69'4	52'0	—
17	Clear -	0'0	0'2	0'0	0'0	56'0	31'9	—
18	Clear -	0'6	0'0	0'0	0'0	56'3	37'7	—
19	Clear -	0'4	0'2	0'0	0'4	66'5	31'3	—
20	Clouded; cum.-strat. and haze; thunder and lightning and rain from 9 ^h to 16 ^h -	1'0	1'0	1'0	0'4	51'6	33'1	0'22
21	Clouded; cir.-cum., cum.-strat., and haze; sheet lightning in S. and S.W.; auroral light in N. from 12 ^h to 16 ^h -	1'0	0'2	—	—	58'6	41'2	0'10
22	Clouded; cir.-cum. and haze; rain from 1 ^h to 2 ^h ; sheet lightning from 9 ^h to 14 ^h -	1'0	0'4	0'9	0'0	68'3	51'1	—
23	Clouded; cir.-cum.; sheet lightning from 9 ^h to 14 ^h in S.E. and S. and W. -	0'6	0'4	0'2	0'6	74'3	57'0	—
24	Clouded; cir.-cum. and cum.-strat. dispersed -	0'5	0'2	0'3	0'1	77'0	56'8	—
25	Clouded; cir.-cum. and cum.-strat. dispersed -	0'6	0'3	0'2	0'0	79'7	51'8	—
26	Clouded; cir.-cum., cum.-strat., and haze; lightning, thunder, and rain from 10 ^h to 17 ^h -	1'0	1'0	1'0	1'0	73'6	51'2	0'09
27	Clouded; cir.-cum. and cum.-strat.; auroral light in N. at 10 ^h , 13 ^h , and 14 ^h -	0'8	0'7	—	—	71'8	59'3	0'02
28	Clouded; cir.-cum. and cum.-strat.; auroral light in N. at 10 ^h , 13 ^h , and 14 ^h -	—	—	0'0	1'0	74'8	51'0	—
JUNE.								
1	Clouded; cir.-cum., cum., and cum.-strat.; heavy showers; loud thunder -	0'9	0'7	1'0	1'0	75'3	55'7	0'18
2	Clouded; cir.-cum. and haze; rain -	0'2	0'0	0'0	1'0	74'5	60'1	0'14
3	Clouded; cir.-cum., cir.-strat., and haze; thunder and rain -	0'3	1'0	1'0	1'0	69'5	48'9	0'23
4	Clouded; cir.-cum., cir.-strat., and haze; drizzling rain; distant thunder -	1'0	1'0	1'0	1'0	72'6	59'7	0'17
5	Clouded; cir.-cum., cum., and haze; clear; rain -	1'0	0'2	0'3	0'4	71'0	53'9	0'26
6	Clouded to 5 ^h ; cir.-cum. and cum.; clear; slight rain -	1'0	0'0	—	—	61'3	42'5	—
7	Clear -	—	—	0'1	0'3	59'7	39'1	—
8	Clear -	0'2	0'0	0'0	0'0	61'0	42'5	—
9	Clear and unclouded -	0'0	0'0	0'0	0'0	68'5	43'5	—
10	Clouded; cir.-cum., cir., and haze; lunar halo from 12 ^h to 14 ^h -	0'0	1'0	1'0	1'0	71'4	41'5	—
11	Clouded; cir.-cum. and haze till 8 ^h ; hazy round horizon -	1'0	0'0	0'0	0'0	76'2	52'6	—
12	Hazy round horizon -	0'0	0'0	0'0	0'9	71'1	49'0	—
13	Clouded; cir.-cum., cir.-strat., and haze -	1'0	0'4	—	—	61'0	51'8	—
14	Clouded; cir.-cum., cir.-strat., and haze -	0'7	1'0	1'0	0'6	67'4	53'5	—
15	Clear till 17 ^h ; clouded; cir.-cum.; clear spaces -	0'0	0'7	0'0	0'0	78'7	56'9	—
16	Clouded; cir.-cum., cir., and haze; sheet lightning in S.S.W. and N.W. horizons from 12 ^h to 14 ^h -	0'5	0'8	1'0	0'8	70'8	49'7	—
17	Clouded; cir.-cum., cir.-strat., and haze; thunder and lightning and heavy rain -	0'9	0'3	1'0	1'0	77'6	58'9	0'78
18	Clouded; cum.-strat. and cir.-cum.; heavy rain; rainbow in E., and sheet lightning -	0'4	0'7	1'0	1'0	78'0	62'2	0'08
19	Clouded; cir.-cum. and cum.-strat.; rain -	1'0	1'0	—	—	81'0	58'9	—
20	Clouded; cir.-cum., cir.-strat., and haze; slight fall of rain -	1'0	0'8	0'5	0'0	62'5	49'7	0'12
21	Generally clear -	0'0	0'0	0'0	0'0	70'0	50'2	—
22	Clear all day -	0'0	0'0	0'0	0'0	75'5	57'0	—
23	Clouded at 9 ^h , 15 ^h , and 17 ^h ; cir., cir.-strat., cir.-cum., and haze -	0'0	1'0	1'0	1'0	80'2	63'0	—
24	Clouded; cir., cir.-strat., and haze -	1'0	1'0	1'0	1'0	84'2	63'0	—
25	Overcast; cum., cir.-cum., cir.-strat., and haze; air oppressive -	1'0	1'0	—	—	81'0	59'5	—
26	Clouded; cir.-strat. and haze; cum., cum.-strat., and cir.-cum. -	0'1	0'0	0'0	0'1	74'6	59'5	—
27	Clear, except cir.-strat.; cir.-cum. and cum. dispersed -	0'2	0'2	0'0	0'3	79'2	62'1	—
28	Clear, except cir.-strat.; cir.-cum. and cum. dispersed -	—	—	0'0	0'3	78'2	62'6	—

* Taken from the lowest reading of the Standard Thermometer.

Sky.	21	Max. Therm.	Min. Therm.	Rain.
0	1'0	59'0	50'8	0'12
0	—	58'0	51'0	—
0	—	63'0	42'7	—
0	1'0	64'0	39'8	—
0	0'4	67'6	40'0	—
0	1'0	64'8	51'0	—
0	1'0	57'5	41'3	—
0	1'0	57'8	47'8	0'15
0	—	62'4	53'9	1'45
0	1'0	59'3	54'5	—
0	0'2	57'6	53'8	—
0	1'0	48'5	40'0	—
0	0'9	64'0	38'6	0'04
0	1'0	71'7	54'0	0'26
0	0'8	70'5	49'8	1'65
0	—	62'8	44'7	—
0	0'4	64'0	43'0	—
0	0'0	69'4	52'0	—
0	0'0	56'0	34'9	—
0	0'0	56'3	37'7	—
0	0'4	66'5	34'3	—
0	0'4	51'6	33'1	0'25
0	—	58'6	44'2	0'16
0	1'0	70'8	47'0	0'11
0	0'0	68'3	51'1	—
0	0'6	74'3	57'0	—
0	0'1	77'0	56'8	—
0	0'0	79'7	54'8	—
0	—	73'6	51'2	0'09
0	—	71'8	59'3	0'05
0	1'0	74'8	54'0	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
JULY.								
D.								In.
1	Clear till 18 ^h ; clouded; cum-strat. and cir-cum.	0'2	0'7	0'0	0'5	83'1	62'6	0'01
2	Clear till 18 ^h ; clouded; cir-cum. and cir-strat.	0'7	0'0	0'0	0'2	79'2	63'4	—
3	Clouded till 11 ^h ; cir-cum., cir-strat., and haze; clear	0'0	1'0	0'4	0'7	77'0	57'0	—
4	Clouded till 3 ^h ; cir-cum., cir-strat., and cir.; clear; sheet lightning in S. horizon at 14 ^h	0'8	0'2	—	—	75'8	54'2	—
5		—	—	0'2	0'0	80'1	61'5	—
6	Clouded; cir., cir-strat., and haze; solar halo, diameter 55 ²	0'7	1'0	0'0	0'4	86'8	61'8	—
7	Clear till 14 ^h ; clouded; cir-cum. and haze	0'3	0'0	1'0	0'9	82'3	55'7	—
8	Clouded till 7 ^h ; cir-cum., cir-strat., and haze; slight rain	0'7	0'0	0'0	0'0	78'2	53'1	0'05
9	Clear till 18 ^h ; clouded; cir-cum., cir-strat., and haze; distant thunder and rain	0'7	0'2	0'0	0'0	81'4	58'6	0'16
10	Clouded; cir-cum.; cum-strat.; heavy squall of wind and rain and hail at 6 ^h and 4 ^h ; sheet lightning and distant thunder	0'6	1'0	1'0	0'9	81'1	67'7	0'21
11		—	0'8	1'0	—	—	94'6	68'0
12	Clouded till 12 ^h ; cir-cum., cir-strat., and haze; rain; distant thunder	—	—	0'0	0'2	87'6	63'8	—
13	Clear till 18 ^h ; clouded; cir-cum. and cir-strat.; heavy rain and sudden squall	0'8	0'9	0'0	0'8	81'8	54'9	0'04
14	Clear, except cir-cum. and cum-strat.	0'9	0'0	0'2	0'6	78'6	45'5	—
15	Clear, except cir-cum. and cum-strat.	0'7	0'2	0'0	1'0	65'7	46'0	—
16	Clouded till 1 ^h ; cir-cum. and cum-strat.; clear	0'2	0'0	0'2	0'1	65'3	49'1	—
17	A few clouds round horizon; cir-cum. and cum-strat.; clear	0'4	0'2	0'2	0'2	70'6	44'5	—
18	Clear to 14 ^h ; clouded; cir-cum. and cir-strat.	0'2	0'0	—	—	73'8	49'0	—
19		—	—	1'0	0'2	75'7	51'2	—
20	Clear; a few cir-cum. and cir-strat. round horizon	0'2	0'0	0'3	0'5	70'5	61'2	—
21	Clouded; cum-strat. and cir-cum.; a few clear spaces	0'9	0'4	0'8	1'0	79'2	57'0	—
22	Clouded; cum-strat. and cir-cum.	0'7	0'8	0'0	0'2	78'0	59'7	—
23	Clouded; cir-cum. and cir-strat.; rain from 14 ^h to 17 ^h	1'0	1'0	1'0	1'0	76'8	55'5	—
24	Clouded; cir-cum. and haze; rain; auroral light in N. at 10 ^h	1'0	0'0	0'0	0'0	81'8	64'8	0'94
25	Clear till 17 ^h ; clouded; cir-cum. and cum-strat.	1'0	0'7	—	—	72'4	61'2	—
26		—	—	0'0	0'2	81'5	60'5	—
27	Clear till 13 ^h ; clouded; cir-strat. and haze	0'0	0'0	0'8	0'4	78'4	59'1	—
28	Clouded; cir-cum. and cir-strat.; sheet lightning; slight rain	0'6	0'0	0'8	0'6	76'3	56'7	—
29	Clouded; cir-cum., cum., and cir-strat.; heavy rain; sheet lightning and thunder	0'7	1'0	0'4	0'4	77'0	62'4	1'49
30	Clouded; cir-cum. and cum.; clear spaces	0'6	0'9	1'0	0'5	85'0	67'7	—
31	Clear; a few cir-cum. dispersed	0'2	0'0	0'0	0'0	88'4	65'3	—
AUGUST.								
1	Generally clear	0'1	0'0	—	—	78'2 ^b	59'2	—
2		—	—	0'0	0'3	77'4	53'5	—
3	Generally clear	0'0	0'0	0'0	0'0	78'4	56'5	—
4	Clouded from 13 ^h to 15 ^h ; afterwards clear	0'0	0'0	1'0	0'0	81'8	58'5	—
5	Clear till 3 ^h ; clouded; cir-cum., cir-strat., and haze	0'2	1'0	1'0	0'0	85'4	65'0	—
6	Clear to 14 ^h ; clouded; cir., cir-strat., and haze	0'2	1'0	1'0	1'0	86'4	61'4	—
7	Clouded all day; cir., cir-cum., and haze	1'0	1'0	1'0	1'0	83'0	62'0	—
8	Clouded till 11 ^h ; cir-cum., cir-strat., and haze; rain at intervals; vivid lightning; thunder	1'0	1'0	—	—	82'6	65'8	0'21
9		—	—	0'0	0'9	74'5	67'0	0'06
10	Clouded; cir-cum. and haze till 4 ^h ; clear	0'7	0'0	0'0	0'0	71'6	62'5	—
11	Generally clear	0'0	0'0	0'7	0'5	78'6	53'2	—
12	Clouded; cir-cum., cum-strat., and haze	0'0	0'0	1'0	0'9	73'7	52'7	—
13	Clouded; cir-cum., cum., and haze; heavy shower of rain; lightning and thunder; auroral light in N.; lunar halo at 15 ^h	1'0	0'5	0'6	0'3	81'6	66'0	0'32
14		0'4	0'0	0'0	0'0	84'8	61'5	—
15	Clouded; cir. and cir-cum. dispersed; clear	0'0	0'0	—	—	79'6	57'8	—
16	Clear; sheet lightning; auroral light in N. at 13 ^h and 15 ^h	—	—	0'0	0'0	82'6	67'6	0'55
17		0'4	0'0	0'0	0'6	68'3	59'5	—
18	Clear, except cir-cum. and cir-strat. dispersed round horizon	0'2	0'0	0'3	1'0	72'8	49'5	—
19	Clouded; cir-cum., cir-strat., and haze	1'0	1'0	1'0	1'0	65'7	49'6	—
20	Clouded; cir-cum., cir-strat., and haze; rain	1'0	0'8	0'4	0'5	69'0	61'8	0'39
21	Generally clouded; cir-cum.; cir-strat.; a few clear spaces	0'7	0'8	0'8	1'0	69'0	57'3	—
22	Clouded; cir-cum., cir-strat., and haze; rain; cleared up	1'0	0'8	—	—	74'4	62'4	—
23		—	—	0'0	0'0	73'9	56'0	—
24	Unclouded	0'0	0'0	0'0	0'0	77'7	55'9	—
25	Unclouded	0'1	0'0	0'0	0'6	69'7	52'0	—
26	Partly clouded; cir. and cir-strat. to 7 ^h ; clear	0'7	0'0	0'0	0'5	73'7	55'9	—
27	Clouded; cir-cum. and cir-strat.; solar halo; lightning, thunder, and rain from 14 ^h to 16 ^h	1'0	0'5	1'0	1'0	72'2	57'7	0'04
28	Clouded; cum-strat. and cir-cum.; aurora at 10 ^h ; sheet lightning	0'4	0'2	0'0	0'6	76'3	61'0	0'06
29	Clouded; cir., cir-strat., and haze; storm, lightning, thunder, and rain, from 0 ^h to 3 ^h	1'0	0'8	—	—	77'2	59'7	0'16
30		—	—	0'0	0'0	77'0	58'5	—
31	Generally clear	0'2	0'0	0'0	0'0	78'6	60'5	—

* Taken from the highest reading of the Standard Thermometer.

* The Max. Therm. for this month are the highest readings of the Standard Thermometer.

Toronto Mean Time.	Weather and Phenomena.	Extent of Clouds &c.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
SEPTEMBER.								
1	Clouded till 17 ^h ; cir.-cum. and cir.-strat.; clear	0'1	0'0	0'8	0'0	81'2	60'5	—
2	Clouded; cir.-cum. and haze	1'0	1'0	1'0	1'0	84'3	65'0	—
3	Clouded all day; cir.-cum., cum.-strat., and haze; rain	1'0	1'0	1'0	1'0	82'2	69'0	—
4	Clouded; cir.-cum., cum.-strat., and cum.; rain	0'9	0'3	0'8	0'8	74'8	66'8	—
5	Clouded; cir.-cum., and cum.-strat.	1'0	0'0	—	—	78'2	70'0	—
6		—	—	0'3	0'3	79'6	60'0	—
7	Clouded; cir.-cum., cum.-strat., and cum.; squalls, lightning, thunder, and slight rain	0'1	1'0	1'0	0'3	74'1	64'8	0'04
8	Clouded; cir.-cum. and cum. till 6 ^h ; clear	0'8	0'0	0'2	0'4	83'4	60'0	—
9	Clear till 12 ^h ; clouded; cir.-strat. and cir.-cum.	0'1	0'0	0'6	0'0	70'5	51'2	—
10	Clouded; cir.-cum. and cir.-strat.; clear	0'2	—	1'0	0'8	65'5	57'7	—
11	Clouded; cir.-cum. and cir.-strat.; distant thunder; sheet lightning; auroral light in N. from 9 ^h to 11 ^h	1'0	0'0	0'6	0'6	68'4	58'5	—
12	Clouded; cir.-cum., cir.-strat., and haze; lightning, thunder, and rain; auroral light in N. from 8 ^h to 11 ^h	0'1	0'0	—	—	78'8	66'1	0'28
13	Clouded; cir.-cum., cum.-strat., and haze; lightning, thunder, and rain	—	—	0'4	0'3	79'6	60'3	—
14	Clouded till 12 ^h ; cir.-cum., cum.-strat., and haze; lightning, thunder, and rain	0'8	0'5	0'0	0'0	79'6	64'0	0'05
15	Clear all day	0'0	0'0	0'0	0'0	82'2	54'7	—
16	Clouded; cir.-cum., cum.-strat., and haze; auroral light in N. at 11 ^h	0'8	0'0	1'0	1'0	66'4	44'1	—
17	Clouded all day; cir.-strat., cir., and haze; rain	1'0	1'0	1'0	0'2	66'0	52'0	0'10
18	Clouded; cir.-cum. and cum.-strat.; clear	0'3	0'0	0'0	0'0	63'6	56'2	—
19	Clouded; cir.-cum. and cum.-strat.; rain	0'6	0'0	—	—	67'4	46'2	—
20		—	—	0'9	1'0	72'6	46'8	0'31
21	Clouded; cir.-cum. and cum.-strat.; clear, brilliant aurora from 9 ^h to 17 ^h	0'2	0'0	0'0	0'0	70'7	51'2	—
22	Generally clear; auroral light in N. from 13 ^h to 15 ^h	0'0	0'0	0'0	0'1	61'0	38'3	—
23	Generally clear; sheet lightning and thunder from 7 ^h to 13 ^h	0'0	0'0	0'1	1'0	64'8	43'6	—
24	Clouded; cir.-cum. and cum.-strat.; rain greater part of day	1'0	1'0	1'0	1'0	72'8	59'2	0'25
25	Clouded; cir.-cum. and haze; rain ceased at 8 ^h	1'0	1'0	0'0	0'0	65'8	49'0	1'80
26	Clear to 17 ^h ; clouded; cir.-cum. and cum.-strat.	0'8	0'0	—	—	57'0	42'9	0'07
27		—	—	0'0	0'0	61'3	45'7	0'14
28	Clouded; cir.-cum. and cir.-strat.	0'1	0'6	1'0	0'4	55'2	37'3	—
29	Clouded; cir.-cum. and cir.-strat.	0'7	0'1	0'7	0'0	59'2	51'2	—
30	Clouded; cir.-cum., cir.-strat., and haze	0'0	1'0	0'0	1'0	67'9	54'9	—
OCTOBER.								
1	Clouded; cum.-strat., cir.-strat., and cir.-cum.; rain at 7 ^h and 12 ^h	1'0	1'0	1'0	1'0	69'5	50'0	0'07
2	Clouded; cir.-cum. and haze; rain; auroral light in N. at 8 ^h and 9 ^h	0'3	0'1	0'1	0'4	54'2	45'0	—
3	Clouded; cir.-cum. and cum.-strat.; lunar halo at 8 ^h and 9 ^h	0'6	1'0	—	—	54'6	37'5	—
4		—	—	1'0	0'0	55'6	41'7	—
5	Clear all day	0'0	0'0	0'0	0'0	55'5	40'3	—
6	Clear from 13 ^h to 17 ^h ; clouded; detached cir.-cum.	0'5	0'7	0'0	0'0	65'9	39'5	—
7	Clouded; cir.-cum. and haze; sheet lightning and rain from 7 ^h to 12 ^h	0'8	1'0	0'9	1'0	64'0	49'2	0'25
8	Clouded; cum.-strat., cir.-cum., and haze; rain, thunder, and lightning	1'0	1'0	1'0	0'8	69'2	59'9	0'16
9	Clouded till 8 ^h ; cum.-strat. and cir.-cum.; rain; aurora from 11 ^h to 15 ^h	1'0	0'0	0'0	1'0	64'4	56'8	—
10	Generally clear; aurora from 14 ^h to 16 ^h	0'4	0'0	—	—	70'1	36'1	—
11		—	—	0'0	0'0	48'4	35'0	—
12	Clouded; cir.-cum., cir.-strat., and haze; rain from 6 ^h to 17 ^h	0'7	1'0	1'0	1'0	53'1	46'3	0'05
13	Clouded; cir.-cum., cir.-strat., and haze; rain	1'0	0'9	0'0	1'0	62'8	46'9	—
14	Clouded; cum.-strat., cir.-cum., and haze; rain	0'6	1'0	0'5	0'7	49'1	33'9	—
15	Clouded; cir.-cum. and cir.-strat.; rain	0'8	1'0	1'0	1'0	52'0	36'1	0'05
16	Clouded; cir.-cum., cir.-strat., and haze; rain, lightning, and thunder	1'0	1'0	1'0	1'0	50'2	38'4	0'17
17	Clouded; cir.-cum., cir.-strat., and haze; snow	1'0	0'2	—	—	58'6	32'7	—
18		—	—	1'0	0'6	36'2	23'1	—
19	Clouded; cir.-cum., cir., and haze; auroral light; rain	1'0	0'6	1'0	1'0	41'1	30'6	—
20	Clouded; cir.-cum. and haze; clear after part of day	0'8	0'1	0'0	1'0	48'2	41'3	—
21	Clouded; cir.-cum., cir.-strat., and haze; a few clear spaces	1'0	0'3	1'0	1'0	48'4	30'0	—
22	Clouded; cir.-cum. and haze; clear	0'8	0'6	0'6	1'0	43'5	36'9	—
23	Clouded; cum.-strat., cir.-cum., and haze; clear	1'0	0'2	0'1	0'9	37'4	20'7	—
24	Clouded; cir.-cum. and haze; clear	0'4	0'2	—	—	43'0	32'7	—
25		—	—	0'0	1'0	46'2	27'2	—
26	Clouded all day; cir.-cum. and haze; rain from 10 ^h to 14 ^h	0'9	1'0	1'0	1'0	48'4	31'8	—
27	Clouded; cir.-cum. and haze; rain	0'8	0'9	0'6	1'0	53'4	47'1	—
28	Clouded; cir.-cum., cum.-strat., and haze	0'1	1'0	1'0	0'7	51'0	28'4	—
29	Clouded; cir.-cum. and haze	1'0	1'0	1'0	1'0	39'8	28'3	—
30	Clouded; cum.-strat. and cir.-cum. till 11 ^h ; clear	1'0	1'0	0'4	1'0	47'4	33'7	—
31	Clouded; cir.-cum., cir.-strat., and haze; rain	1'0	1'0	—	—	39'2	30'6	0'54
Nov. 1		—	—	1'0	1'0	40'6	31'3	—

Max. Therm.			Min. Therm.			Rain.			Toronto Mean Time			Weather and Phenomena.			Extent of Cloudy Sky.				Max. Therm.			Min. Therm.			Rain.		

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D.	JANUARY.							In.
1	Clouded all day; cir.-cum. and haze; rain from 3 ^h to 11 ^h	1'0	1'0	1'0	1'0	40'1	34'7	0'40
2	Clouded; dense cir.-cum., cir., and haze; lunar halo, diameter 46', bright and perfect	1'0	1'0	—	—	36'0	31'9	—
3	Clouded to 18 ^h ; cir.-cum., cir.-strat., and haze; rain and sleet; remainder clear	1'0	1'0	1'0	0'1	35'6	24'3	1'10
4	Partly clouded; cir. and cir.-cum.; lunar halo, diameter 35', perfect	0'9	0'2	1'0	1'0	41'8	32'9	—
5	Clouded all day; cir.-cum., cir.-strat., and haze; snow at 16 ^h and 17 ^h	1'0	1'0	1'0	1'0	37'6	28'9	—
6	Clouded to 8 ^h ; cir.-cum. and cum.-strat.; snow; remainder partly clear	1'0	0'1	0'3	0'3	33'6	24'4	—
7	Clouded; cir.-cum., cum.-strat., and haze	1'0	0'2	1'0	1'0	28'8	7'5	—
8	Clouded till 11 ^h ; cir.-cum., cir.-strat., and haze; clear	0'9	1'0	—	—	11'4	9'1	—
9	Clouded to 6 ^h and at 21 ^h ; cir.-strat. and haze; clear	—	—	0'0	0'1	20'1	9'3	—
10	Clouded from 13 ^h to 23 ^h ; cir.-cum., cir.-strat., and haze; remainder of the day clear	1'0	0'0	0'0	1'0	16'2	2'7	—
11	Clouded; cir.-cum., cir.-strat., and haze; clear from 5 ^h to 11 ^h	0'1	0'0	1'0	1'0	11'9	11'1	—
12	Clouded all day; cir.-cum., cum.-strat., and cir.-strat.; rain	1'0	0'0	1'0	1'0	23'9	12'4	—
13	Clouded all day; cir.-cum., cum.-strat., and cir.-strat.; rain	1'0	1'0	1'0	1'0	35'4	31'7	—
14	Clouded all day; cum.-strat. and cir.-cum.; rain; sheet lightning in S.W.	1'0	1'0	1'0	1'0	36'7	33'9	0'11
15	Clouded; cir.-cum. and cum.-strat.; snow; clear from 2 ^h to 12 ^h	0'3	0'0	—	—	42'4	31'8	—
16	Clouded; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	0'6	35'4	3'1	—
17	Clear; some cir.-cum. and cum.-strat. dispersed	0'3	0'0	0'0	0'0	28'2	10'8	—
18	Clear; cir.; lunar halo at 6 ^h and 7 ^h	0'5	0'2	0'0	0'4	11'8	6'2	—
19	Partly clouded; cir.-cum., cir.-strat., and haze; showers of snow	0'6	0'0	0'0	0'8	21'3	10'0	—
20	Clouded; cir.-cum., cir.-strat., and haze; halo and parhelia round the sun at 3 ^h	1'0	1'0	0'4	0'3	11'2	3'1	—
21	Partly clouded; cir.-cum., cir.-strat., and haze	0'5	0'4	—	—	22'0	11'9	—
22	Generally clouded; cir.-cum. and cir.-strat.; snow at 16 ^h and 17 ^h	1'0	1'0	1'0	0'6	32'6	21'2	—
23	Clouded; cir.-cum., cum.-strat., and haze; rain	0'9	1'0	1'0	1'0	27'8	15'9	—
24	Nearly clear; cir.-cum. and haze	0'1	0'0	0'0	1'0	28'0	24'6	0'25
25	In general clouded; cir.-cum., cir., and haz	1'0	0'3	1'0	1'0	16'0	2'9	—
26	Clouded all day; cir.-cum. and haze; slight snow	1'0	1'0	1'0	1'0	22'3	16'3	—
27	Clouded all day; cir.-cum., cir.-strat., and haze; lunar halo at 8 ^h , diameter about 35'	1'0	0'9	—	—	32'1	17'4	—
28		—	—	1'0	1'0	22'0	2'9	—
FEBRUARY.								
1	Generally clouded; cir.-cum., cum.-strat., and haze	1'0	1'0	1'0	0'6	24'0	6'1	—
2	Mostly clouded; cir.-strat., cir., and haze; rain at 11 ^h and 12 ^h	0'5	1'0	1'0	1'0	32'4	23'1	—
3	Clouded from 3 ^h to 15 ^h ; cir.-cum. and haze; snow from 1 ^h to 15 ^h ; clear	1'0	1'0	0'9	0'1	40'9	37'1	0'55
4	Generally clear	0'0	0'0	0'0	0'0	37'6	12'2	—
5	Clouded from 2 ^h to 14 ^h ; cir.-cum. and cir.-strat.; remainder of the day clear	1'0	0'5	0'0	0'0	23'4	8'1	—
6	Clear to 11 ^h ; remainder of the day clouded; cir.-cum. and haze	0'0	0'0	—	—	21'4	11'1	—
7	Mostly clouded; cir.-cum., cir.-strat., and haze; snow from 10 ^h to 14 ^h	1'0	1'0	1'0	0'3	27'8	17'7	—
8	Generally clouded; cum.-strat. and cir.-cum.	1'0	1'0	1'0	1'0	35'4	26'6	—
9	Mostly clouded; cir.-cum. and cum.-strat.; snow at intervals	1'0	0'2	1'0	1'0	32'2	10'9	—
10	Mostly clouded; cum.-strat. and cir.-cum.; snow from 11 ^h to 15 ^h	1'0	1'0	1'0	0'2	35'0	10'8	—
11	Generally clouded; cum.-strat., cir.-cum., and haze; some snow	0'8	1'0	1'0	1'0	21'8	10'9	—
12	Clouded all day; cir.-cum. and cum.-strat.; snow from 12 ^h to 15 ^h	1'0	1'0	—	—	26'4	7'8	—
13	Mostly clouded; cir.-cum., cum.-strat., cir.-strat., and haze; snow at 16 ^h and 17 ^h	0'9	0'4	1'0	1'0	25'6	22'5	—
14	Clouded all day; cir.-cum. and haze; snow; hail; rain from 19 ^h to 23 ^h	1'0	1'0	1'0	1'0	29'2	11'1	—
15	Clouded at 4 ^h and from 16 ^h to 23 ^h ; cum.-strat. and cir.-cum.; remainder of the day clear	1'0	0'0	0'0	1'0	24'0	13'4	—
16	Clouded all day; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	1'0	31'9	13'1	—
17	Clouded all day; cir.-strat., cir.-cum., and haze; snow occasionally	1'0	1'0	1'0	1'0	31'2	26'3	—
18	Clouded all day; cum.-strat. and haze; snow nearly all day	1'0	1'0	—	—	32'3	22'1	—
19	Clouded till 5 ^h ; cir.-cum. and haze; slight snow; remainder of the day clear; auroral light in N. from 5 ^h to 13 ^h	1'0	0'8	0'0	0'0	20'8	14'7	—
20	Clear till 2 ^h	0'0	0'0	0'0	0'3	20'0	0'0	—
21	Generally clouded; cir.-cum. and haze; snow from 15 ^h to 17 ^h	0'7	1'0	1'0	0'8	17'8	0'9	—
22	Generally clear	0'1	0'0	0'0	0'1	22'4	15'7	—
23	Clouded all day; cir.-cum. and haze; snow from 11 ^h to 17 ^h	1'0	1'0	1'0	1'0	25'9	7'0	—
24	Clouded all day; cir.-cum. and haze; snow from 5 ^h	1'0	1'0	—	—	27'9	25'3	—
25		—	—	1'0	0'7	33'0	26'1	—

21	Max. Therm.	Min. Therm.	Rain.
	°	°	In.
1'0	40'1	34'7	0'40
—	36'0	31'9	—
1'0	36'7	32'1	—
0'1	35'6	24'3	1'10
1'0	41'8	32'9	—
1'0	37'6	28'9	—
0'3	33'6	24'4	—
1'0	28'8	7'5	—
—	11'4	9'1	—
0'1	20'1	9'3	—
1'0	16'2	2'7	—
1'0	11'9	11'1	—
1'0	23'9	12'4	—
1'0	35'4	31'7	—
1'0	36'7	33'9	0'11
—	42'4	31'8	—
1'0	35'4	3'1	—
0'3	28'2	10'8	—
0'0	34'5	9'2	—
0'1	11'8	6'2	—
0'8	21'3	10'0	—
0'3	14'2	3'1	—
—	22'0	11'9	—
0'6	32'6	12'2	—
1'0	27'8	15'9	—
1'0	28'0	24'6	0'25
1'0	33'8	12'7	—
1'0	16'0	2'9	—
1'0	22'3	16'3	—
—	32'1	17'4	—
1'0	22'0	2'9	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MARCH.								
D.								
1	Generally cloudy; cir.-cum. and cum.-strat.; light snow	1'0	1'0	1'0	0'2	28'3	19'2	In.
2	Generally cloudy; cir.-cum. and cum.-strat.	0'4	1'0	1'0	1'0	29'0	18'2	—
3	Clouded till 8 ^h ; cir., cir.-cum., and cum.-strat.; remainder of the day clear	0'8	0'0	0'0	0'1	30'2	20'3	—
4	Clouded till 11 ^h ; cir.-cum., cir.-strat., and haze; remainder of the day mostly clear	0'8	0'3	0'0	0'1	35'2	12'9	—
5	Clear till 4 ^h ; remainder of the day cloudy; cir.-cum., cir.-strat., and cum.-strat.	0'1	1'0	1'0	1'0	32'5	10'2	—
6	Clouded till 7 ^h ; cir.-cum., cir., and haze; remainder of the day nearly clear; halos and parhelia round the sun at 4 p.m. of 6 ^h	1'0	0'2	—	—	30'3	23'9	—
7	Clear till 13 ^h ; overcast; cir. and haze	0'0	0'0	1'0	0'8	35'7	32'1	0'10
8	Clouded all day; cir.-cum., cum.-strat., and haze	1'0	1'0	1'0	1'0	35'4	18'3	—
9	Nearly clear till 20 ^h ; remainder of the day cloudy; cir.-cum., cir.-strat., and haze	0'0	0'0	0'2	1'0	25'3	20'8	—
10	Clouded till 6 ^h ; cum.-strat., cir.-cum., and haze; clear	1'0	0'0	0'0	0'1	36'3	14'7	—
11	Generally clear; clouded from 5 ^h to 14 ^h ; cir.-cum. and haze	0'1	0'8	0'0	0'0	22'3	5'6	—
12	Clear till 12 ^h ; remainder overcast; cir.-cum. and haze	0'0	0'0	—	—	23'1	10'5	—
13	Mostly clear; some cir.-cum. round horizon	—	—	1'0	0'4	26'5	7'9	—
14	Partly cloudy till 5 ^h ; cir.-cum., cum.-strat., and haze; remainder quite clear	0'4	0'0	0'0	0'4	30'3	7'2	—
15	Clear till 2 ^h ; remainder cloudy; cir., cir.-strat., and haze; solar halo at 3 ^h , diameter 35°	1'0	0'0	0'0	0'0	24'1	10'5	—
16	Clear all day	0'4	0'8	0'9	1'0	23'7	12'5	—
17	Clear till 9 ^h ; remainder of the day cloudy; cir.-cum. and haze; brilliant aurora at night; lightning at 15 ^h in S.W.	0'0	0'0	0'0	0'0	34'3	26'5	—
18	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain most of the day	0'7	0'0	1'0	1'0	42'3	21'1	—
19	Clouded all day; cir.-cum. and haze; slight rain	1'0	1'0	—	—	36'5	25'1	0'55
20	Generally cloudy; cir.-cum. and haze; snow from 8 ^h to 11 ^h	—	—	1'0	1'0	39'2	18'9	—
21	Partly cloudy; cir.-cum., cir.-strat., and haze; lunar halo at 9 ^h , diameter 40°	1'0	1'0	1'0	1'0	30'7	23'2	0'20
22	Clouded all day; cir.-cum., cum.-strat., and haze	1'0	1'0	1'0	0'1	32'9	31'4	—
23	Generally cloudy; cir.-cum., cum.-strat., cir., and haze	0'4	0'9	1'0	0'4	40'9	23'2	—
24	Partly cloudy and clear alternately; cir., cir.-cum., and haze	1'0	1'0	1'0	1'0	37'9	30'0	—
25	Clear till 4 ^h ; remainder cloudy; cir., cir.-cum., and haze	0'9	1'0	0'5	0'6	43'6	30'1	—
26	Clouded till 4 ^h ; remainder cloudy; cir., cir.-cum., and haze	0'2	0'0	—	—	36'6	18'0	—
27	Clouded till 20 ^h ; cir.-cum., cir.-strat., and haze; heavy storm; thunder; lightning; snow from 2 ^h to 16 ^h	—	—	0'7	0'0	26'1	17'1	—
28	Clear all day; some cir. and strat.	0'1	1'0	1'0	1'0	35'4	30'0	—
29		1'0	1'0	1'0	0'1	43'9	23'0	—
30		0'0	0'0	0'0	0'3	27'9	14'5	—
APRIL.								
1	Clouded all day; cir.-cum., cir., and haze; snow from 6 ^h to 12 ^h	1'0	1'0	—	—	26'6	9'3	—
2	Clouded till 7 ^h and from 20 ^h to 23 ^h ; cir., cir.-cum., and haze; remainder of the day clear	—	—	1'0	1'0	32'5	29'0	—
3	Clouded all day; cir., cir.-strat., and haze; rain at 16 ^h and 17 ^h	1'0	0'0	—	—	37'2	27'7	—
4	Generally cloudy; cir., cir.-cum., and haze; rain occasionally	—	—	0'0	1'0	42'1	28'1	—
5	Clear till 14 ^h ; remainder cloudy; cir.-strat., cir.-cum., and haze; brilliant aurora at night	1'0	1'0	1'0	1'0	40'5	30'9	—
6	Clouded till 12 ^h ; cir., cir.-strat., cir.-cum., and haze; solar halo at 2 ^h , diameter 30°, perfect; rain from 8 ^h to 10 ^h ; auroral light in N. at 11 ^h ; clear	0'7	0'7	1'0	1'0	41'4	35'0	0'07
7	Partially cloudy; cir.-strat. and cir.-cum.	0'0	0'0	0'9	1'0	49'7	39'7	—
8	Clear till 9 ^h ; remainder cloudy; cir.-cum., cum.-strat., and haze	1'0	1'0	0'0	0'0	55'1	33'7	—
9	Partially cloudy; cir.-cum., cir.-strat., and haze	0'6	0'3	1'0	0'5	59'5	33'7	—
10	Clear till 6 ^h ; remainder of the day cloudy; cir.-strat. and haze	0'9	0'0	—	—	45'9	36'7	—
11	Clouded till 7 ^h ; cir.-cum. and cum.-strat.; remainder nearly clear	—	—	1'0	0'8	48'8	27'7	—
12	Generally cloudy; cir.-cum., cir.-strat., and haze	0'8	0'3	0'5	0'0	41'3	30'3	—
13	Clear till 2 ^h ; remainder cloudy; cir., cir.-strat., and haze; solar halo at 3 ^h , diameter 35°	0'0	0'8	1'0	1'0	48'3	26'5	—
14	Clouded till 7 ^h ; cir.-cum. and cum.-strat.; remainder nearly clear	0'3	1'0	0'6	1'0	46'7	29'7	0'04
15	Generally cloudy; cir.-cum., cir.-strat., and haze	0'9	0'1	0'0	0'1	45'9	29'7	—
16	Clear from 6 ^h to 14 ^h ; remainder of the day cloudy; cir., cir.-cum., and haze	1'0	0'8	1'0	0'7	38'1	24'2	—
17	Clouded and clear alternately; cir.-strat. and haze; auroral light in N. from 13 ^h to 16 ^h	1'0	0'0	—	—	39'8	30'9	—
18	Clouded all day; cir.-cum., cir.-strat., and haze; rain; thunder occasionally	—	—	1'0	1'0	35'4	17'4	—
19	Clouded all day; cir.-cum., cir.-strat., and haze; rain; thunder occasionally	0'1	0'8	0'0	1'0	31'0	21'4	—
20	Generally cloudy; cir.-cum., cir.-strat., and haze; rain and thunder from 10 ^h to 16 ^h	1'0	1'0	1'0	1'0	45'5	29'5	0'15
21	Clouded all day; cir.-strat., cir., and cir.-cum.; rain nearly all day	1'0	0'4	1'0	1'0	45'8	40'7	0'76
22	Clouded till 3 ^h ; cir.-cum. and cum.-strat.; remainder clear	1'0	1'0	1'0	1'0	65'1	47'9	1'00
23	Clear till 11 ^h ; remainder cloudy; cir.-cum., cir.-strat., and cum.-strat.	0'4	0'0	0'0	0'0	51'9	35'1	0'07
24	Mostly cloudy; cir., cir.-strat., and haze	0'0	0'0	—	—	45'5	28'1	—
25	Nearly clear all day	—	—	0'8	1'0	45'1	27'9	—
26	Clouded all day; cir.-strat., cir.-cum., and haze; sheet lightning and thunder to 7 ^h ; rain from 7 ^h to 9 ^h , and at 12 ^h	1'0	0'9	0'9	0'4	51'2	42'1	—
27	Clouded; cir.-cum., cir.-strat., and haze; rain at 5 ^h	0'1	0'0	0'0	0'5	59'5	40'7	—
28	Clear from 10 ^h to 15 ^h ; remainder cloudy; cir.-cum., cir., and cum.-strat.; solar halo at 21 ^h , diameter 25°; imperfect light	1'0	1'0	1'0	1'0	44'1	23'4	0'45
29		1'0	0'7	1'0	0'7	42'7	34'1	0'33
30		0'8	0'8	0'0	0'8	44'6	35'2	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MAY.								
1	Generally clouded; cir.-cum. and cir.-strat.; slight rain from 9 ^h	1'0	1'0	—	—	47'7	26'7	0'05
2	Partly clear to 6 ^h ; remainder clear	—	—	0'8	0'9	47'5	34'5	0'04
3	Clouded to 3 ^h ; cir.-cum. and cum.-strat.; remainder of the day clear	0'6	0'1	0'0	0'0	40'1	35'5	—
4	Clear all day	1'0	0'0	0'0	0'0	48'3	35'0	—
5	Clear all day	0'0	0'0	0'0	0'0	54'3	32'1	—
6	Clear to 2 ^h ; clouded; cir., cir.-strat., and haze; auroral light in N. from 10 ^h to 13 ^h	0'0	0'0	0'0	0'0	60'6	35'3	—
7	Clouded to 12 ^h ; cir.-cum., cir., and haze; clear	0'4	0'6	1'0	1'0	62'4	37'2	—
8	Clouded all day; cir.-cum., and haze; rain from 9 ^h to 13 ^h	1'0	1'0	—	—	62'1	18'9	—
9	Generally clouded; cir.-cum. and haze; slight rain	—	—	0'0	0'0	61'3	46'8	—
10	Clouded to 15 ^h ; cir.-strat. and haze; drizzling rain	1'0	1'0	1'0	1'0	56'7	45'2	0'32
11	Clear all day	0'9	1'0	1'0	0'7	61'4	52'3	0'05
12	Partly clouded to 3 ^h ; cir. and haze; remainder hazy	1'0	1'0	0'4	0'0	64'3	53'9	0'27
13	Clear all day	0'0	0'0	0'0	0'0	66'1	53'6	—
14	Partly clouded to 3 ^h ; cir. and haze; remainder hazy	0'3	0'0	0'0	0'0	61'1	47'7	—
15	Clear all day	0'0	0'0	—	—	61'5	41'7	—
16	Clear all day	—	—	0'0	0'0	69'3	42'2	—
17	Clear to 12 ^h ; overcast; cir. and haze	0'0	0'0	0'0	0'0	61'5	43'2	—
18	Partly clouded from 8 ^h to 16 ^h ; cir., cir.-strat., and haze; clear	0'0	0'6	0'7	0'0	69'5	48'2	—
19	Clear to 16 ^h ; clouded; cir. and haze	0'0	0'0	0'0	1'0	65'7	48'7	—
20	Overcast all day; cir. and haze; slight rain	1'0	1'0	1'0	0'9	62'7	43'5	0'19
21	Clouded all day; cir. and haze; rain from 12 ^h to 23 ^h	1'0	1'0	—	—	63'0	49'9	—
22	Clouded to 7 ^h ; cir.-cum. and cir.-strat.; partly clear	1'0	—	1'0	1'0	68'5	51'5	0'73
23	Clouded to 20 ^h ; cir.-cum., cir.-strat., and haze; light rain; clear	1'0	1'0	0'8	0'0	64'4	47'9	0'25
24	Clear all day	0'1	0'0	0'0	0'0	66'0	37'7	—
25	Nearly clear all day	0'0	0'0	0'1	0'7	57'8	35'9	—
26	Clouded; cir., cir.-strat., and cir.-cum.	0'4	0'8	1'0	1'0	59'2	42'3	—
27	Clouded all day; cir.-cum., cir.-strat., and haze; thunder; lightning; constant rain from 13 ^h to 23 ^h	1'0	1'0	—	—	72'4	55'5	0'11
28	Clouded all day; cir. and haze; constant rain to 16 ^h ; thunder and lightning at 13 ^h and 14 ^h	1'0	—	1'0	1'0	65'4	47'9	0'05
29	Clouded all day; cir. and haze; constant rain to 16 ^h ; thunder and lightning at 13 ^h and 14 ^h	1'0	1'0	1'0	1'0	58'9	43'6	0'60
JUNE.								
1	Generally clouded; cir.-cum., cir.-strat., and haze; rain; thunder; lightning; rainbow at 7 ^h	1'0	1'0	0'0	0'6	58'2	43'8	0'52
2	Clear to 20 ^h ; remainder clouded; cir.-cum.	0'1	0'2	0'0	1'0	62'0	49'4	—
3	Generally clouded; slight rain occasionally	1'0	1'0	1'0	0'6	62'6	45'1	0'14
4	Nearly clear to 20 ^h ; clouded; cir.-cum.	0'2	0'0	0'0	1'0	62'1	52'7	—
5	Mostly clear	0'1	0'0	—	—	62'4	36'7	—
6	Nearly clear to 3 ^h ; remainder clouded; cir.-cum., cir.-strat., and haze	—	—	0'0	0'0	63'7	49'7	—
7	Clouded all day; cum.-strat., cir.-cum., and haze; slight rain from 10 ^h to 12 ^h ; sheet lightning in N.	0'2	1'0	1'0	1'0	64'4	41'5	—
8	Clouded; cir., cir.-strat., and haze; foggy; lightning in N.N.E. from 10 ^h to 13 ^h	1'0	1'0	1'0	1'0	70'5	53'1	0'02
9	Mostly clouded; cir.-cum., cir.-strat., and haze; rain	0'4	0'4	1'0	1'0	61'8	50'9	—
10	Clouded to 17 ^h ; cum.-strat., cir.-cum., and haze; remainder clear; constant rain from 6 ^h to 11 ^h	1'0	1'0	0'5	0'0	75'2	60'7	0'16
11	Mostly clear to 12 ^h ; clouded; cir.-cum. and haze; auroral light at 10 ^h and 11 ^h ; rain from 19 ^h to 23 ^h	1'0	1'0	—	—	64'4	57'0	0'21
12	Clear from 9 ^h to 12 ^h ; remainder clouded; cir.-cum. and cum.-strat.; light rain at 1 ^h and from 18 ^h to 22 ^h	0'1	0'0	—	—	66'7	46'6	—
13	Clouded and clear alternately; cir.-cum., cum.-strat., and cir.-strat.	—	—	1'0	1'0	66'6	46'7	0'18
14	Nearly clear all day	1'0	0'0	1'0	1'0	55'0	47'7	0'16
15	Clear to 20 ^h ; remainder clouded; cir.-cum. and cum.-strat.	0'2	0'0	0'8	0'0	54'6	40'1	—
16	Clear to 20 ^h ; remainder clouded; cir.-cum. and cum.-strat.	0'5	0'0	0'0	0'0	58'6	43'7	—
17	Clouded all day; cir.-cum. and cum.-strat.; rain from 4 ^h to 9 ^h	0'0	0'0	0'0	0'8	56'8	40'2	—
18	Clouded to 3 ^h ; cir.-strat. and haze; remainder mostly clear; thunder; showers at 6 ^h	1'0	1'0	1'0	1'0	67'9	42'7	0'25
19	Generally clouded; cir.-cum. and haze; rain at 1 ^h ; lightning	0'8	0'0	—	—	65'5	56'0	0'48
20	Clouded to 11 ^h ; cir.-cum., cir.-strat., and haze; remainder clear; thunder; showers occasionally	—	—	0'2	0'2	67'1	48'7	0'13
21	Generally clear	0'7	0'9	0'2	1'0	60'2	50'2	0'07
22	Clear to 12 ^h ; remainder clouded; cir.-cum.; cir.-strat.	0'8	0'7	0'0	0'1	67'0	49'0	0'15
23	Clouded to 16 ^h ; cir.-cum., cir.-strat., and haze; thunder and lightning in S.E. at 10 ^h ; clear	0'3	0'1	0'0	0'0	68'4	50'1	—
24	Generally clouded; cir.-cum., cum., and cir.	0'0	0'0	0'6	1'0	71'1	50'7	—
25	Mostly clouded; cir.-cum. and cir.-strat.; thunder at 5 ^h and 6 ^h	0'9	0'2	1'0	0'0	74'6	52'7	—
26	Clouded at 5 ^h and 20 ^h ; cir.-cum. and haze; remainder clear	0'8	0'7	—	—	75'0	58'9	—
27	Generally clear	—	—	1'0	1'0	77'8	59'3	—
28	Clouded at 5 ^h and 20 ^h ; cir.-cum. and haze; remainder clear	0'7	1'0	1'0	1'0	76'4	61'5	—
29	Generally clear	0'7	0'0	0'0	0'8	74'9	55'3	—
30	Generally clear	0'0	0'0	0'0	0'0	72'4	54'9	—

	Max. Therm.	Min. Therm.	Rain.
			In.
9	47.7	26.7	0.05
0	47.5	34.5	0.01
0	40.1	35.5	—
0	48.3	35.0	—
0	54.3	32.1	—
0	60.6	35.3	—
0	62.4	37.2	—
0	62.1	18.9	—
0	61.3	46.8	—
0	56.7	45.2	0.32
7	61.4	52.3	0.05
0	61.3	53.9	0.27
0	66.1	53.6	—
0	61.1	47.7	—
0	61.5	41.7	—
0	69.3	42.2	—
0	61.5	43.2	—
0	65.5	44.1	—
0	69.5	48.2	—
0	65.7	48.7	—
9	62.7	43.5	0.19
0	63.0	49.9	—
0	68.5	51.5	0.73
5	60.8	51.5	—
0	61.4	17.9	0.25
0	66.0	37.7	—
7	57.8	35.9	—
0	59.2	42.3	—
0	72.1	55.5	0.11
0	65.4	47.9	0.05
0	58.9	43.6	0.60

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D.	JULY.							In.
1	Clear all day	0.0	0.0	0.0	0.0	72.1	49.5	—
2	Clear all day	0.0	0.0	0.0	0.0	75.8	53.5	—
3	Mostly clear all day	0.2	0.1	—	—	78.8	54.5	—
4	Mostly clear all day	—	—	0.0	0.3	81.3	51.5	—
5	Mostly clouded all day; thunder; slight rain at 6 ^h	0.8	1.0	1.0	1.0	79.2	55.7	0.03
6	Overcast, with haze	1.0	1.0	1.0	1.0	81.3	66.3	—
7	Generally clouded; cir. and haze	1.0	1.0	0.2	1.0	78.2	62.1	—
8	Clouded at 8 ^h and 21 ^h ; cir. and haze; remainder clear	1.0	0.0	0.0	1.0	80.8	61.0	—
9	Clouded all day; cir. and haze; auroral light in N. at 10 ^h	1.0	1.0	1.0	1.0	80.2	65.2	—
10	Clouded to 11 ^h ; lightning at 11 ^h ; remainder generally clear; auroral light at 13 ^h	0.9	1.0	—	—	81.0	67.5	—
11	Generally clouded; cir. and haze	0.2	1.0	1.0	1.0	81.3	67.1	—
12	Clouded to 8 ^h ; cir.-cum., cir.-strat., and haze; clear	1.0	0.0	0.0	0.0	82.7	63.5	—
13	Generally clear	0.0	0.4	0.0	0.5	83.1	55.5	—
14	Partly clear to 8 ^h and from 14 ^h to 18 ^h ; clouded; cir. and haze	0.5	1.0	0.0	1.0	75.7	50.9	—
15	Clear from 9 ^h to 14 ^h ; generally clouded; cir.-cum., and haze	0.9	0.0	0.5	0.8	76.4	59.0	—
16	Clouded to 14 ^h ; cir.-cum. and haze; clear; rain, thunder, and lightning during the day	1.0	1.0	—	—	82.8	66.1	0.75
17	Clouded and clear alternately; cir., cir.-cum., and cum.; sheet lightning	0.5	0.0	0.2	1.0	84.2	70.0	0.20
18	Clouded all day; cir.-cum. and cum.-strat.; thunder, lightning, and showers during the day	1.0	1.0	1.0	1.0	87.0	68.0	0.65
19	Partially clouded; cir.-cum. and cum.-strat.; constant lightning, and rain at 16 ^h	0.3	0.0	0.7	0.3	80.2	68.4	0.84
20	Generally clear	0.3	0.0	0.0	0.2	81.0	66.2	—
21	Generally clear to 15 ^h ; clouded; cir. and haze	0.1	0.1	0.1	1.0	78.8	48.2	—
22	Clouded all day; cir. and haze; rain, thunder, and lightning	1.0	1.0	—	—	74.2	53.0	0.25
23	Generally clear	0.3	0.1	0.0	0.1	75.9	58.5	—
24	Mostly clear	0.1	0.0	0.0	0.2	62.9	43.2	—
25	Clouded to 8 ^h ; cir.-cum., cir.-strat., and haze; clear	0.8	0.0	0.0	0.0	64.6	44.0	—
26	Generally clouded; cir.-cum., cir.-strat., and haze; rain	1.0	1.0	1.0	0.4	65.4	47.2	0.25
27	Partly clouded to 12 ^h ; cum.-strat., cir.-cum., and cum.; clear; light rain	0.3	0.7	0.0	0.1	70.4	55.7	0.09
28	Clouded to 8 ^h ; cum., cir.-cum., and cum.-strat.; rain; clear	0.9	0.1	—	—	66.2	44.0	0.03
29	Aug. 1	—	—	0.0	0.4	71.2	51.1	—
	AUGUST.							
1	Generally clear	0.4	0.0	0.0	0.2	69.6	46.0	—
2	Generally clear	0.1	0.0	0.0	0.4	72.2	47.9	—
3	Generally clear; aurora from 9 ^h to 14 ^h	0.7	0.0	0.3	0.3	73.8	50.5	—
4	Clouded and clear alternately; cir., cir.-strat., and haze	0.1	0.6	0.0	0.8	76.6	55.0	—
5	Mostly clouded; cir., cir.-strat., and haze; lightning, thunder, rain	1.0	0.9	1.0	1.0	74.4	58.0	0.07
6	Clouded; cir., cir.-strat., and haze; solar halo at 2 ^h , diameter 40'; rain	0.9	0.2	—	—	78.0	57.8	0.38
7	Clouded; cir.-cum., cum.-strat., and haze; lightning at 9 ^h and 10 ^h	0.4	0.6	1.0	0.7	72.8	58.5	0.16
8	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain	1.0	1.0	1.0	1.0	74.3	62.0	—
9	Clouded to 4 ^h ; cir.-cum. and haze; nearly clear; rain from 9 ^h to 4 ^h	1.0	0.0	0.1	0.2	77.4	57.2	0.06
10	Generally clouded; cir.-cum. and haze; thunder at 3 ^h	0.7	0.9	0.9	0.7	73.0	63.0	—
11	Clouded; cir.-cum. and cir.-strat.; lightning; rain	0.9	0.3	1.0	0.4	75.2	61.0	0.03
12	Clear from 12 ^h to 18 ^h ; remainder clouded; lightning in S.W. from 12 ^h to 15 ^h	0.6	0.8	—	—	76.9	64.5	—
13	Clouded at 4 ^h and 21 ^h ; cir.-cum. and cir.-strat.; remainder clear; auroral light in N. at 13 ^h	0.7	0.0	0.0	0.8	79.1	64.5	—
14	Generally clouded; cum.-strat. and cir.-cum.; lightning; thunder; rain at intervals	1.0	1.0	1.0	0.5	82.6	63.0	0.79
15	Clear from 6 ^h to 11 ^h ; remainder clouded; cir.-cum. and cir.	0.7	0.0	1.0	0.7	75.6	52.5	—
16	Partly clouded; cir.-cum. dispersed; clear	0.5	0.2	0.0	0.2	67.4	44.6	—
17	Partly clouded to 12 ^h ; cir.-cum. and cum.-strat.; slight rain; clear	0.9	0.2	0.0	0.1	66.0	50.0	0.17
18	Nearly clear; auroral light in N. at 11 ^h	0.2	0.0	—	—	72.6	52.5	—
19	Generally clear to 20 ^h ; remainder clouded; cir. and haze	0.2	0.2	0.0	0.1	73.6	51.5	—
20	Partly clouded; cir. and haze	0.4	0.2	0.5	0.0	72.4	51.0	—
21	Clear and partly clouded alternately	0.3	0.0	0.4	0.6	70.3	52.0	—
22	Generally clouded; cir.-cum. and haze; rain	0.3	0.8	1.0	1.0	70.8	51.7	0.15
23	Clear all day; very light rain	0.1	0.0	0.0	0.0	74.5	55.8	0.03
24	Generally clear all day	0.1	0.4	—	—	65.7	46.0	—
25	Mostly clear from 6 ^h to 18 ^h ; remainder clouded; cum., cir.-cum., and haze; rain	1.0	0.1	0.0	1.0	68.0	51.0	0.31
26	Clear from 6 ^h to 10 ^h ; remainder clouded; cir.-cum. and haze	1.0	0.0	1.0	1.0	73.0	48.1	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D.	SEPTEMBER.							In.
1	Nearly clear all day	0'2	0'0	0'0	0'1	62'4	44'9	—
2	Generally clear to 18 ^h ; clouded	0'1	0'0	0'0	1'0	66'1	49'3	—
3	Generally clouded; cir.-cum. and cir.-strat.; slight rain at 6 ^h	0'9	0'8	1'0	1'0	71'8	52'2	0'01
4	Clouded to 12 ^h ; cir.-cum. and haze; lightning, thunder, and rain from 10 ^h to 11 ^h ; hurricane	1'0	0'9	—	—	74'5	56'0	0'51
5	at Cornwall, Upper Canada, at 21 ^h	—	—	0'0	0'0	60'3	57'6	1'24
6	Mostly clear	0'4	0'0	0'0	0'3	69'9	47'3	—
7	Generally clouded; cir.-cum. and cir.-strat.; clear occasionally	0'8	0'9	1'0	1'0	67'4	51'0	—
8	Mostly clear all day; cir.-cum., cir.-strat., and cum.-strat.; thunder, lightning, and rain from 6 ^h to 17 ^h	1'0	1'0	1'0	0'9	65'0	61'9	2'50
9	Clouded to 5 ^h ; cir.-cum., cir.-strat., and cir.; quite clear; rain	0'9	0'0	0'0	0'0	74'5	49'7	0'15
10	Clear and fine to 20 ^h ; clouded	0'1	0'0	0'0	0'7	60'2	41'3	—
11	Nearly clear to 11 ^h ; remainder clouded; cir.-cum. and cum.-strat.; slight rain	0'1	0'0	—	—	63'7	45'7	—
12	Clouded all day; cum.-strat. and cir.-strat.; slight rain	1'0	1'0	1'0	1'0	62'8	47'6	0'09
13	Quite clear all day	0'0	0'0	0'0	0'0	65'8	52'9	0'01
14	Quite clear	0'0	0'0	0'0	0'0	55'1	41'0	—
15	Generally clear to 5 ^h ; remainder clouded; cir.-cum. and cir.-strat.	0'0	0'4	1'0	0'6	57'6	35'0	—
16	Generally clouded; cir.-cum. and cir.-strat.; rain from 8 ^h to 17 ^h	0'7	1'0	1'0	1'0	59'4	47'7	0'25
17	Clouded all day; cir.-cum. and cir.-strat.; rain from 0 ^h to 4 ^h	1'0	1'0	—	—	62'2	54'5	0'08
18	Clouded; cir.-cum. and cir.-strat.; slight rain	1'0	0'7	1'0	0'7	57'7	51'6	—
19	Nearly clear to 20 ^h ; remainder clouded; cum.-strat. and cir.-cum.	0'2	0'0	0'0	0'6	56'8	51'2	—
20	Clouded to 6 ^h ; cir.-cum. and cum.-strat.; clear	0'6	0'0	0'0	0'1	62'4	41'8	—
21	Nearly clouded; cir.-cum. and cir.-strat.; lunar halo at 9 ^h ; diameter 40 ² , imperfect	0'7	1'0	1'0	1'0	59'8	45'2	—
22	Clouded all day; cir.-cum. and haze; rain from 4 ^h to 14 ^h	1'0	1'0	1'0	1'0	67'0	54'3	0'09
23	Clouded all day; cir.-cum., cir.-strat., and haze; heavy storm of thunder; lightning; rain from 12 ^h to 15 ^h	1'0	1'0	—	—	55'6	48'7	0'01
24	Clouded to 7 ^h ; cir., cir.-strat., and cir.-cum.; showers, thunder, and lightning from 5 ^h to 8 ^h ; clear	0'6	0'1	0'0	0'0	58'8	51'0	1'08
25	Clear from 12 ^h to 17 ^h ; remainder clouded; cir.-cum. and cum.-strat.; lightning, thunder, and rain at 0 ^h	0'8	0'1	0'0	1'0	68'8	46'2	0'04
26	Partly clouded to 15 ^h ; cir.-cum. and cum.-strat.; thunder; lightning; rain from 6 ^h to 4 ^h ; frost; clear	0'8	0'3	0'2	0'0	60'0	39'7	0'11
27	Generally clouded	1'0	1'0	1'0	0'6	55'0	37'3	0'11
D.	OCTOBER.							
1	Clouded to 5 ^h ; remainder clear	0'7	0'0	0'0	0'0	54'4	43'7	—
2	Clouded to 10 ^h ; cir.-cum.; remainder mostly clear	0'2	1'0	—	—	55'6	36'2	—
3	Generally clouded; cir.-cum. and cir.-strat.; lightning; thunder from 9 ^h to 17 ^h ; showers at 1 ^h	—	—	0'0	0'1	55'9	38'5	—
4	Mostly clouded; rain most of the day	0'6	1'0	1'0	1'0	60'2	52'5	0'76
5	Clouded; dense; cir.-cum. and haze; rain most of day	1'0	1'0	1'0	1'0	61'6	56'0	1'18
6	Clouded; cir.-cum. and cir.-strat.; slight rain most of day	1'0	1'0	1'0	1'0	58'4	54'5	0'35
7	Clouded to 8 ^h ; cir.-cum. and haze; clear; aurora at 11 ^h	1'0	0'2	0'0	0'3	56'4	55'1	—
8	Clouded to 9 ^h ; cir.-cum., cir.-strat., and haze; slight rain; clear	1'0	1'0	—	—	58'7	40'2	0'01
9	Clouded; cir.-cum. and haze; slight rain	—	—	0'3	0'0	56'2	42'2	—
10	Clouded to 10 ^h and partly to 25 ^h ; cir.-cum., cir.-strat., and haze; rain to 10 ^h ; auroral light in N. from 15 ^h to 18 ^h	0'6	0'3	1'0	1'0	57'2	38'0	0'01
11	Clear from 6 ^h to 12 ^h ; remainder partly clouded; cir.-cum. and cir.-strat.; lightning in E. at 7 ^h	1'0	1'0	0'3	0'8	50'6	36'9	0'26
12	Clear from 6 ^h to 13 ^h ; remainder clouded; cir.-cum. and cum.-strat.; snow; aurora at 12 ^h	0'4	0'0	0'7	0'3	47'5	37'8	—
13	Clouded to 10 ^h ; cir.-cum. and haze; clear; auroral light at 14 ^h	0'6	0'0	1'0	0'9	47'0	32'0	—
14	Clouded from 9 ^h to 9 ^h ; cir.-cum. and haze; remainder partly clear; solar halo at 0 ^h ; diameter 25 ² , rain from 6 ^h to 8 ^h	1'0	0'5	0'0	0'0	40'4	26'7	—
15	Partly clouded from 3 ^h to 14 ^h ; cir.-cum. and haze; clear; slight rain	0'3	1'0	—	—	44'0	37'2	—
16	Clouded to 5 ^h ; cir.-cum. and cir.-strat.; clear	—	—	0'0	0'6	55'3	46'3	—
17	Clear to 14 ^h ; clouded; cir., cir.-strat., and haze	0'3	1'0	0'0	0'0	60'0	36'4	0'14
18	Clouded all day; cir., cir.-strat., and haze; rain from 10 ^h to 17 ^h	0'8	0'0	0'0	0'0	61'4	41'0	—
19	Clouded to 16 ^h ; cir.-cum. and haze; rain at 23 ^h ; remarkable appearance of aurora at 16 ^h	0'0	0'0	0'2	1'0	54'1	28'8	—
20	Generally clear to 12 ^h ; remainder clouded; dense; cir. and haze; constant rain	1'0	1'0	1'0	1'0	54'0	30'2	0'55
21	Clouded from 0 ^h to 8 ^h and from 16 ^h to 23 ^h ; cir.-cum. and cum.-strat.	1'0	1'0	0'4	0'0	44'5	37'3	—
22	Clear from 4 ^h to 13 ^h ; clouded; slight rain	0'1	0'3	—	—	40'4	33'3	—
23	Clouded to 9 ^h ; cir.-cum. and cum.-strat.; clear	—	—	1'0	0'9	49'0	35'5	0'97
24	Generally clear	0'6	0'0	0'0	0'9	45'7	45'3	—
25	Clear from 9 ^h to 15 ^h ; remainder clouded	0'3	0'0	0'8	0'3	48'4	28'4	—
26	Clear from 9 ^h to 15 ^h ; remainder clouded	1'0	1'0	0'0	0'0	31'8	20'4	—
27	Clear from 9 ^h to 15 ^h ; remainder clouded	0'0	0'1	0'0	0'3	35'5	24'7	—
28	Clear from 9 ^h to 15 ^h ; remainder clouded	0'9	0'0	0'0	1'0	40'8	27'3	—
29	Clear from 9 ^h to 11 ^h ; remainder clouded; cir., cir.-strat., and haze; rain from 13 ^h to 17 ^h	1'0	0'0	—	—	48'9	32'2	—
30		—	—	1'0	1'0	50'9	32'0	0'39
31		—	—	1'0	1'0	50'9	32'0	0'39

* Taken from the lowest reading of the Standard Thermometer.

Toronto Mean Time.	Max. Therm.	Min. Therm.	Rain.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
					3	9	15	21			
			In.								In.
NOVEMBER.											
1				Generally clouded; cir. and cir.-strat.; dense fog	0'3	1'0	1'0	1'0	51'0	47'7	—
2				Generally clouded; cir.-cum. and cir.-strat.; lightning; faint aurora	1'0	1'0	0'2	1'0	54'8	46'4	—
3				Clouded to 5 ^h ; and from 18 ^h to 23 ^h ; cir.-cum. and haze; lightning, thunder, and rain from 0 ^h to 5 ^h ; remainder clear	1'0	0'0	0'0	0'6	57'9	45'5	0'09
4			0'01	Mostly clear to 20 ^h ; cir.-cum.; remainder clouded	0'1	0'0	0'1	0'8	51'4	40'3	—
5			0'51	Clouded to 12 ^h ; and from 16 ^h to 21 ^h ; remainder clear; auroral light in N. at 15 ^h and 16 ^h	0'5	1'0	0'0	0'9	51'1	34'3	—
6			1'24	Partly clear to 12 ^h ; remainder clouded; cir.-cum., cir.-strat., and haze; lightning; thunder at 16 ^h and 17 ^h	0'8	0'2	—	—	45'9	29'2	—
7			—	Clouded all day; dense haze; rain	1'0	1'0	1'0	1'0	38'0	27'8	0'03
8			2'50	Clear to 14 ^h ; remainder clouded; cir.-cum. and cum.-strat.; aurora at 9 ^h and 10 ^h	0'1	0'0	1'0	1'0	51'4	47'7	0'06
9			0'15	Clouded all day; cir.-cum. and cum.-strat.	1'0	1'0	1'0	1'0	55'2	36'7	—
10			—	Clouded to 18 ^h ; cir.-cum. and cum.-strat.; clear	1'0	1'0	1'0	0'1	39'7	34'1	—
11			—	Clouded to 18 ^h ; cir.-cum. and cir.-strat.; remainder generally clear	1'0	0'9	1'0	0'3	37'2	30'5	—
12			0'09	Clouded all day; cir.-strat., cir.-cum., and haze; rain from 9 ^h to 16 ^h on the 13th	1'0	1'0	—	—	39'4	33'1	0'71
13			0'01	Generally clouded; cir.-cum. and cum.-strat.	1'0	1'0	0'4	1'0	41'1	36'2	—
14			—	Nearly clouded all day; cir.-cum., cir.-strat., and haze	0'9	1'0	1'0	0'9	41'0	27'2	—
15			—	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 9 ^h to 16 ^h	1'0	1'0	1'0	1'0	47'7	43'7	0'17
16			—	Clouded all day; cir.-cum., cir.-strat., and haze; mist; rain	1'0	1'0	0'9	1'0	52'0	42'7	0'32
17			0'25	Clouded to 10 ^h ; cir.-cum. and cum.-strat.; nearly clear	1'0	0'9	0'1	0'1	49'6	38'2	—
18			0'09	Mostly clouded all day; cir.-cum., cir.-strat., and haze; lunar halo at 6 ^h , diameter 45 ^o , perfect	0'8	1'0	—	—	33'1	18'3	—
19			0'31	Nearly clear from 2 ^h to 13 ^h ; clouded; cir.-strat. and haze; very slight rain	0'1	0'2	1'0	1'0	31'2	27'7	—
20			—	Clouded all day; cir.-strat., cir.-cum., and haze; rain	1'0	1'0	1'0	1'0	46'2	40'7	0'01
21			—	Generally clouded; cir.-cum., cir.-strat., and haze; slight rain	1'0	1'0	1'0	0'5	52'0	46'1	0'25
22			—	Clouded all day; cir.-cum., cum.-strat., and cir.-strat.; slight rain; snow; auroral light in N. at 6 ^h and 7 ^h	1'0	1'0	1'0	1'0	49'7	38'9	0'13
23			0'09	Partly clear from 5 ^h to 13 ^h ; clouded; cir.-cum. and cir.-strat.; aurora at 8 ^h	0'8	0'0	1'0	1'0	42'9	24'7	—
24			0'01	Clear from 11 ^h to 13 ^h ; clouded; cir.-strat., cir.-cum., and haze; clear; some snow	0'6	1'0	—	—	23'2	19'7	—
25			0'19	Partly clear; cir.-cum., cir.-strat., and haze	0'2	0'4	0'8	0'3	24'6	8'7	—
26			—	Clear to 18 ^h ; remainder clouded; cir.-cum., cir.-strat., and haze	0'0	0'0	0'0	1'0	18'3	11'5	—
27			0'04								
28			0'11								
29			0'11								
30			—								
31			—								
DECEMBER.											
1			0'25	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 8 ^h to 17 ^h	1'0	1'0	1'0	1'0	29'9	22'7	0'25
2			0'11	Clouded all day; cir.-cum. and haze; slight rain from 20 ^h to 23 ^h	1'0	1'0	1'0	1'0	40'0	35'0	0'11
3			—	Nearly clouded all day; cir.-cum. and haze	1'0	1'0	1'0	0'9	38'0	32'5	—
4			—	Partially clouded; cir.-strat., cir.-cum., and haze; snow	1'0	1'0	—	—	33'5	25'2	—
5			0'03	Clouded to 11 ^h ; cir.-cum. and cum.-strat.; remainder mostly clear	0'9	1'0	0'0	0'2	33'2	26'0	—
6			0'76	Partly clear; cir. and cir.-strat. occasionally	1'0	0'1	0'6	0'5	33'0	28'2	—
7			0'18	Partly clear from 9 ^h to 12 ^h ; clouded; cir., cir.-strat., and haze	1'0	0'1	1'0	1'0	39'4	30'3	—
8			0'35	Mostly clouded all day; cir.-strat. and haze; rain to 8 ^h	1'0	1'0	1'0	0'6	45'5	35'2	0'21
9			—	Clouded all day; cir.-cum., cir., and haze; rain from 14 ^h to 17 ^h	1'0	1'0	1'0	1'0	36'8	38'0	—
10			0'01	Partly clear from 5 ^h to 11 ^h ; remainder clouded; cir.-cum. and haze; slight rain from 12 ^h to 17 ^h	0'1	0'2	—	—	49'6	33'0	0'05
11			0'01	Clouded all day; cir.-cum. and haze; rain, snow, and sleet all day	1'0	1'0	1'0	1'0	42'0	33'0	0'27
12			0'01	Clouded to 18 ^h ; cir.-cum. and haze; slight rain from 1 ^h to 9 ^h ; clear	1'0	1'0	1'0	0'1	36'5	29'9	0'11
13			0'26	Clear and fine to 18 ^h ; remainder clouded; cir.-cum. and cir.-strat.	0'1	0'0	0'0	0'9	33'2	29'5	—
14			—	Generally clouded; cir.-cum. and cir.-strat.; aurora from 15 ^h to 17 ^h	1'0	1'0	0'4	0'7	33'4	12'9	—
15			—	Generally clear; auroral light at 11 ^h	0'6	0'2	0'6	0'0	31'4	14'9	—
16			—	Clouded all day; cir.-cum. and haze; aurora at 17 ^h ; great magnetic disturbance	1'0	1'0	—	—	27'2	10'9	—
17			—	Generally clouded; cir.-cum. and cir.-strat.; clear occasionally	0'2	1'0	1'0	0'7	33'6	12'1	—
18			0'14	Clouded all day; cir., cir.-cum., and cum.-strat.; snow from 9 ^h to 15 ^h	1'0	1'0	1'0	1'0	15'9	9'3	—
19			—	Clouded all day; cir.-cum. and haze; snow to 1 ^h	1'0	1'0	1'0	1'0	24'6	18'1	—
20			0'55	Clouded; cir.-cum., cir.-strat., and haze; snow to 4 ^h	1'0	1'0	1'0	0'4	24'8	17'4	—
21			—	Generally clouded; cir.-cum., cir.-strat., and haze; snow	0'8	1'0	1'0	0'9	22'2	15'2	—
22			—		—	—	—	—	13'4	0'3	—
23			—	Clouded all day; cir.-cum., cir.-strat., and haze; snow	1'0	1'0	1'0	1'0	19'0	5'1	—
24			0'97	Clouded all day; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	1'0	28'8	18'2	—
25			—	Generally clouded; cir. and cir.-cum.	1'0	0'4	1'0	1'0	36'4	32'9	—
26			—	Clouded all day; cir.-strat. and haze	1'0	1'0	1'0	1'0	43'0	36'2	—
27			—	Clouded all day; dense haze; drizzling rain	1'0	1'0	1'0	1'0	45'9	40'1	0'22

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
JANUARY.								
D.								In.
1	Clouded till 12 ^h ; cir.-cum. and haze; rain; remainder clear	1'0	1'0	—	—	45'2	42'2	0'26
2		—	—	0'0	0'1	51'1	29'7	—
3		1'0	1'0	0'8	1'0	35'4	30'7	—
4		0'1	0'2	1'0	1'0	37'6	26'7	—
5		1'0	0'1	0'0	0'5	34'0	17'5	—
6		1'0	1'0	1'0	1'0	36'2	10'5	—
7		1'0	1'0	1'0	1'0	14'3	10'9	—
8		1'0	1'0	—	—	29'6	18'1	—
9	Clouded till 12 ^h ; cir.-cum. and haze; some snow; remainder clear	—	—	0'0	0'0	33'4	13'0	—
10	Clear till 14 ^h ; remainder clouded; cir.-cum. and haze; slight snow	0'2	0'0	1'0	1'0	13'8	11'4	—
11	Clouded; cir.-cum. and haze; slight snow occasionally; auroral light at 17 ^h	1'0	1'0	1'0	0'0	1'0	—8'9	—
12	Clouded; cir.-cum. and cir.-strat.	0'9	1'0	1'0	1'0	22'4	7'1	—
13	Clouded; cir.-strat. and haze	1'0	1'0	1'0	1'0	32'4	20'3	—
14	Clouded; cir.-strat. and haze; rain all day	1'0	1'0	1'0	1'0	36'5	35'2	0'95
15	Clouded till 5 ^h ; cir.-cum. and haze; aurora from 1 ^h to 2 ^h	0'9	0'2	—	—	40'2	36'0	—
16		—	—	0'6	0'3	47'0	27'7	—
17		0'1	1'0	1'0	0'9	32'5	23'2	—
18		0'4	0'3	0'0	0'1	30'9	19'9	—
19		0'5	1'0	1'0	0'9	29'8	5'7	—
20		0'7	0'6	1'0	1'0	28'8	17'6	—
21		0'9	0'7	1'0	1'0	41'4	24'7	—
22		1'0	1'0	—	—	45'0	13'6	—
23	Clouded all day; cir.-cum. and cir.-strat.; particles of snow	—	—	1'0	1'0	29'2	17'0	—
24	Clear till 11 ^h ; remainder clouded; cir.-cum. and cir.-strat.	0'0	0'0	1'0	1'0	24'2	17'4	—
25	Clouded; cir.-strat. and haze; slight rain from 8 ^h to 10 ^h , and from 15 ^h to 17 ^h	1'0	1'0	1'0	1'0	32'0	24'3	0'01
26	Clouded all day; cir.-strat. and haze; rain ceased at 10 ^h	1'0	1'0	1'0	1'0	39'3	35'0	0'77
27	Clouded all day; cir.-cum. and cum.-strat.	1'0	0'8	1'0	0'9	40'2	36'5	—
28	Mostly clouded till 10 ^h , and at 21 ^h ; cir.-cum. and cum.-strat., and haze; remainder clear; auroral light from 8 ^h to 17 ^h ; some snow	1'0	0'8	0'0	0'8	41'8	30'1	—
29	Clouded; cir.-cum. cum.-strat. and haze; showers of snow; rain from 17 ^h to 22 ^h	1'0	1'0	—	—	31'8	21'2	—
30		—	—	1'0	1'0	31'8	21'7	0'25
31	Clouded till 4 ^h ; cir.-cum. and cir.-strat., and haze; remainder of day mostly clear	1'0	0'5	0'0	1'0	32'0	22'5	—
FEBRUARY.								
1	Clear from 7 ^h to 12 ^h ; remainder clouded; cum.-strat. and cir.-cum.	1'0	0'0	0'6	0'0	38'5	21'2	—
2	Clouded from 11 ^h to 17 ^h ; cir.-cum. and haze; remainder of day mostly clear	0'2	0'5	1'0	0'5	29'7	17'9	—
3	Clouded from 14 ^h to 21 ^h ; cir.-strat. and haze; remainder mostly clear	0'4	0'1	1'0	1'0	35'8	27'0	—
4	Clouded; cir.-strat. and haze; rain and snow from 0 ^h to 11 ^h	1'0	1'0	1'0	1'0	40'8	26'1	0'41
5	Clouded; cir.-cum. and cir.-strat.; slight snow from 3 ^h to 4 ^h	1'0	1'0	—	—	39'0	26'7	—
6		—	—	1'0	0'9	28'4	23'9	—
7	Mostly clear; aurora from 9 ^h to 12 ^h	0'0	0'0	0'1	1'0	28'4	21'0	—
8	Mostly clouded; cir.-cum. and cum.-strat.; auroral light in N. at 17 ^h and 18 ^h	0'9	1'0	0'1	0'8	26'6	16'1	—
9	Mostly clouded; cir.-cum. and cum.-strat.; auroral light in N. at 17 ^h and 18 ^h	0'9	1'0	0'7	0'7	27'8	17'6	—
10	Mostly clouded from 7 ^h to 10 ^h ; cir.-strat. and haze; remainder mostly clear	0'1	1'0	0'0	0'1	31'2	13'1	—
11	Mostly clear till 6 ^h ; remainder clouded; cir.-strat. and haze; halo round moon at 8 ^h and 9 ^h	0'3	1'0	1'0	0'6	21'0	0'0	—
12	Mostly clear; cir.-strat. and haze	0'0	0'0	—	—	15'0	10'8	—
13		—	—	0'7	0'0	25'2	11'9	—
14	Mostly clear and fine	0'4	0'7	0'0	0'0	31'7	18'2	—
15	Mostly clear and fine; auroral light in N. at 12 ^h and 13 ^h	0'0	0'3	0'0	0'0	38'2	18'5	—
16	Quite clear, with very little exception	0'0	0'0	0'8	0'1	32'6	19'5	—
17	Quite clear	0'0	0'0	0'0	0'0	36'0	19'7	—
18	Quite clear	0'0	0'0	0'0	1'0	36'2	19'8	—
19	Mostly clouded; cir.-cum. and cir.-strat.; rain from 5 ^h to 8 ^h	1'0	1'0	—	—	37'4	28'5	0'27
20		—	—	0'1	0'3	38'8	34'0	0'02
21	Mostly clear till 8 ^h ; remainder clouded; cir.-strat. and haze; aurora from 7 ^h to 10 ^h	0'0	1'0	1'0	1'0	41'2	36'3	—
22	Clouded all day; cir.-strat. and haze; slight rain and snow from 2 ^h to 9 ^h ; aurora from 13 ^h to 14 ^h	1'0	1'0	1'0	0'2	46'6	29'7	0'08
23	Partly clouded; cir.-cum. and cum.-strat.; auroral light, streamers, &c., from 8 ^h to 12 ^h	0'5	0'1	1'0	0'8	40'0	28'6	—
24	Mostly clouded; cir.-cum. and cum.-strat.; aurora from 8 ^h to 17 ^h	0'7	1'0	0'2	0'1	36'5	22'4	—
25	Generally clear	0'4	0'0	0'0	0'3	29'8	10'7	—
26	Clear from 12 ^h to 15 ^h ; remainder clouded	1'0	0'6	—	—	23'4	11'4	—
27		—	—	0'0	1'0	33'6	22'9	—
28	Clouded; cir.-cum. cum.-strat. and haze; snowing most of the day	1'0	1'0	0'6	1'0	30'0	12'6	—
29	Generally clouded; cum.-strat. and cum.-strat.; showers of snow and drift	0'9	0'4	1'0	0'1	36'1	18'6	—

	Max. Therm.	Min. Therm.	Rain.
	°	°	In.
1	45.2	42.2	0.26
2	51.1	29.7	—
3	35.4	30.7	—
4	37.6	26.7	—
5	34.0	17.5	—
6	36.2	10.5	—
7	14.3	10.9	—
8	29.6	18.1	—
9	33.4	13.0	—
10	13.8	11.4	—
11	1.0	-8.9	—
12	22.4	7.1	—
13	32.4	20.3	—
14	36.5	35.2	0.95
15	40.2	33.0	—
16	47.0	27.7	—
17	32.5	23.2	—
18	30.9	19.9	—
19	29.8	5.7	—
20	28.8	17.6	—
21	41.4	24.7	—
22	45.0	13.6	—
23	29.2	17.0	—
24	24.2	17.4	—
25	32.0	24.3	0.01
26	39.3	35.0	0.77
27	40.2	36.5	—
28	41.8	30.1	—
29	31.8	24.2	—
30	31.8	21.7	0.25
31	32.0	22.5	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D.	MARCH.					°	°	In.
1	Partially clear and partially clouded; cir.-cum. and cum.-strat.; auroral light in N. at 11 ^h	1.0	0.0	1.0	1.0	22.2	7.3	—
2	Clouded all day; cir.-cum., cir.-strat., and haze; snowing most of the day	1.0	1.0	1.0	1.0	21.0	0.0	—
3	Clear from 7 ^h to 11 ^h , and at 21 ^h ; remainder clouded, with cir.-cum., cir.-strat., and haze	1.0	0.0	1.0	0.0	20.8	14.4	—
4	Clouded all day; cir.-cum. and cir.-strat.; showers of snow; squally	1.0	1.0	—	—	26.1	16.9	—
5		—	—	1.0	1.0	24.2	13.0	—
6	Clouded till 2 ^h , and at 13 ^h and 15 ^h ; cir.-strat. and cir.-cum.; aurora at 12 ^h	0.4	0.2	1.0	1.0	22.7	14.4	—
7	Clouded till 2 ^h , and from 9 ^h to 14 ^h ; cir.-strat. and haze; remainder mostly clear	0.4	1.0	0.4	1.0	32.1	15.5	—
8	Mostly clouded; cir.-cum., cir.-strat., and haze; slight rain; auroral light in N. at 9 ^h	1.0	0.4	1.0	1.0	41.1	35.7	0.06
9	Nearly clear from 12 ^h to 15 ^h ; remainder clouded; cir.-cum. and cum.-strat.	1.0	1.0	0.2	1.0	47.1	22.5	—
10	Generally clear	0.1	0.0	0.0	0.0	28.8	15.9	—
11	Clear till 12 ^h ; remainder mostly clouded; cir.-cum. and haze; shower of snow at 13 ^h	0.0	0.1	—	—	31.4	16.1	—
12	Mostly clear	0.5	0.0	0.2	0.3	34.0	29.2	0.28
13	Mostly clear; aurora from 11 ^h to 14 ^h	0.6	0.0	0.0	0.2	39.6	22.9	—
14	Mostly clear till 15 ^h ; remainder clouded; cir.-strat. and haze	0.0	0.0	0.2	1.0	15.8	3.4	—
15	Generally clouded; cir.-strat. and haze; halo round moon at 8 ^h and 9 ^h , diameter 45 ^o ;	0.8	1.0	0.3	1.0	17.6	8.0	—
16	aurora at 16 ^h and 17 ^h	—	—	—	—	—	—	—
17	Clear	0.1	0.0	0.0	0.1	28.5	22.9	—
18	Clouded till 11 ^h , and at 21 ^h ; cir.-cum. and cir.-strat.; remainder of day generally clear;	1.0	1.0	—	—	26.7	16.2	—
19	auroral light in N. at 16 ^h and 17 ^h	—	—	0.0	1.0	34.2	22.4	—
20	Clouded; cum.-strat., cir.-cum., and haze; rain from 0 ^h to 8 ^h	1.0	1.0	1.0	0.6	33.9	23.3	0.72
21	Mostly clouded till 4 ^h , and at 21 ^h ; cum.-strat. and cir.-strat.; remainder clear	0.7	0.0	0.0	1.0	33.3	33.8	—
22	Clouded; cir.-cum. and cum.-strat.	1.0	1.0	1.0	1.0	49.0	28.6	—
23	Mostly clouded till 1 ^h ; remainder clear	0.2	0.0	0.0	0.0	37.0	31.8	—
24	Partially clouded; cir.-strat. and cir.; aurora from 9 ^h to 12 ^h	0.4	0.1	0.7	1.0	40.6	27.2	—
25	Clouded; cir.-cum. and haze; rain at 11 ^h	1.0	1.0	—	—	39.0	33.7	—
26	Clouded till 8 ^h ; cir. and cir.-strat.; remainder mostly clear; faint auroral light at 16 ^h	0.6	0.3	0.0	0.8	46.2	33.0	0.17
27	Generally clouded; cir.-strat. and cir.; nearly clear at intervals	0.2	1.0	0.4	0.0	41.2	26.7	—
28	Clear	0.0	0.0	0.0	0.3	45.3	31.3	—
29	Mostly clouded; cir.-strat. and haze	1.0	1.0	0.7	1.0	58.6	30.3	—
30	Mostly clouded; cir.-cum. and haze; rain from 4 ^h to 11 ^h ; auroral light in N. from 12 ^h to 15 ^h	1.0	1.0	0.3	1.0	45.0	34.7	0.97
31								
	APRIL.							
1	Mostly clouded; cum.-strat. and cum.; aurora at night; halo round the sun at 21 ^h , diameter	1.0	1.0	—	—	61.6	33.0	—
2	45 ^o , perfect	—	—	0.0	1.0	36.2	27.2	—
3	Clouded; cir., cir.-strat., and haze	1.0	1.0	1.0	1.0	41.0	31.7	—
4	Clouded; cir.-cum. and haze; rain from 0 ^h to 9 ^h ; aurora at 15 ^h and 16 ^h	1.0	1.0	0.0	0.0	47.7	42.2	0.28
5	Mostly clear; aurora from 10 ^h to 15 ^h	0.3	0.0	0.0	0.0	47.2	30.0	—
6	Clear all day; beautiful aurora from 9 ^h to 16 ^h	0.1	0.0	0.0	0.0	43.5	26.5	—
7	Clear	0.0	0.0	0.0	0.0	49.6	34.5	—
8	Mostly clear	0.1	0.0	—	—	46.5	22.7	—
9	Clear till 9 ^h ; remainder clouded; cir.-cum. and haze	0.0	0.3	1.0	0.4	53.5	32.3	—
10	Mostly clouded; cir.-cum. and haze	1.0	1.0	0.2	0.3	65.1	43.4	—
11	Mostly clear till 4 ^h ; remainder clouded; cir.-cum. and haze; slight rain from 9 ^h to 12 ^h	0.3	1.0	1.0	1.0	51.6	30.9	0.02
12	Clouded; cir.-cum., cum.-strat., and haze; slight rain from 2 ^h to 7 ^h	1.0	0.8	1.0	1.0	54.0	36.4	0.02
13	Clouded till 6 ^h ; cir.-cum. and cum.; remainder partially clear	0.8	0.1	0.8	0.0	42.2	35.7	—
14	Nearly clear all day; aurora from 9 ^h to 11 ^h	0.1	0.0	—	—	47.8	33.5	—
15	Partially clear till 2 ^h ; remainder clouded; cir.-cum. and haze	0.9	1.0	1.0	1.0	62.2	30.7	—
16	Clouded till 10 ^h ; cir.-strat. and haze; remainder clear; snow from 2 ^h to 9 ^h	1.0	1.0	0.0	0.0	44.8	32.9	—
17	Mostly clear	0.0	0.0	0.0	0.5	36.6	23.8	—
18	Mostly clear till 15 ^h ; remainder mostly clouded; cir.-cum., cir.-strat., and haze; aurora in	0.3	0.0	—	—	38.8	23.7	—
19	N. from 14 ^h to 16 ^h	—	—	0.2	1.0	50.0	33.2	—
20	Clear from 4 ^h to 11 ^h ; remainder mostly clouded; cir.-cum., cir.-strat., and haze; auroral	0.5	0.0	—	—	54.1	40.5	—
21	light at 8 ^h	—	—	0.1	1.0	51.6	27.8	—
22	Clouded till 7 ^h ; cum.-strat. and cir.-cum.; remainder clear; aurora at 10 ^h	0.9	0.0	0.0	0.0	48.2	34.3	—
23	Mostly clear	0.2	0.6	0.5	0.3	43.6	25.7	—
24	Mostly clear	0.6	0.0	0.0	0.0	45.7	28.9	—
25	Mostly clear till 15 ^h ; remainder clouded; cir. and haze	0.1	0.0	0.6	1.0	47.8	25.7	—
26	Clouded all day; cir. and haze; slight rain from 6 ^h to 15 ^h	1.0	1.0	1.0	1.0	53.8	36.1	0.17
27	Mostly clear till 20 ^h ; remainder clouded; cum.-strat., cir.-cum., and haze	0.4	0.0	—	—	49.3	41.5	—
28		—	—	0.0	1.0	50.0	28.2	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MAY.								
D.								In.
1	Clouded till 8 ^h ; cir. cir-strat. and haze; remainder mostly clear; slight rain from 0 ^h to 7 ^h	1'0	0'0	0'7	0'8	52'6	33'4	0'11
2	Mostly clouded till 8 ^h ; cir-cum. cir-strat. and haze; remainder almost clear; auroral light at 6 ^h	1'0	0'3	0'0	0'7	49'4	34'6	—
3	Partly clouded till 8 ^h ; cum-strat. and cir-cum.; remainder clear	0'9	0'0	0'0	0'0	53'7	37'5	—
4	Clouded till 13 ^h ; cir-strat. cir-cum. and haze; remainder clear; thunder, lightning, and showers of rain from 6 ^h to 12 ^h	1'0	1'0	0'1	0'0	64'2	40'1	—
5	Mostly clouded from 3 ^h to 10 ^h ; cir-cum. and cum-strat.; thunder, lightning, and showers of rain from 5 ^h to 9 ^h	0'5	0'9	0'0	0'8	58'4	46'7	0'03
6	Mostly clouded till 6 ^h ; cum. and cir-cum.; distant thunder; remainder mostly clear; halo round the sun at 20 ^h , diameter 40 ^s	0'8	0'0	—	—	70'6	47'1	—
7	Generally clouded till 12 ^h ; cir-strat. and haze; remainder clear; auroral light in N. at 12 ^h and 13 ^h	—	—	0'2	1'0	71'8	47'7	0'09
8	Clouded; cir-cum. and cum.; showers of rain, lightning, and thunder from 6 ^h to 10 ^h	0'7	1'0	1'0	0'2	57'4	39'2	0'22
10	Generally clouded; cir. cir-cum. and haze; rain from 12 ^h to 17 ^h	0'9	1'0	1'0	1'0	62'0	42'9	0'15
11	Generally clouded; cir. and haze; rain from 0 ^h to 5 ^h ; imperfect halo round the moon at 9 ^h ; halo round the sun at 19 ^h , diameter 45 ^s	1'0	1'0	0'3	0'0	55'0	47'5	0'15
12	Generally clear till 15 ^h ; remainder clouded; cir-cum. and haze	0'1	0'0	0'4	1'0	51'4	41'2	—
13	Clouded till 12 ^h ; cir-cum. and haze; rain from 0 ^h to 4 ^h ; remainder mostly clear	1'0	1'0	—	—	54'0	31'3	0'44
14	Mostly clouded; cir. cir-cum. and haze; rain occasionally from 3 ^h to 12 ^h	—	—	0'0	0'6	47'8	39'0	—
15	Clouded till 9 ^h ; cir-cum. cir-strat. and haze; remainder clear	1'0	1'0	1'0	1'0	56'4	32'5	0'23
16	Generally clear; aurora from 9 ^h to 14 ^h	0'1	0'0	0'0	0'5	57'2	46'1	—
17	Clear till 15 ^h ; remainder clouded; cir-cum. and haze	0'0	0'0	0'1	1'0	64'6	43'7	—
18	Generally clouded; cir-cum. and haze; heavy storm of lightning, thunder, and rain between 3 ^h and 5 ^h	1'0	1'0	1'0	0'9	72'9	48'6	0'38
19	Generally clouded; cir-cum. and cir-strat.; showers of rain occasionally	1'0	1'0	—	—	71'7	55'5	0'26
20	Generally clouded; cir. cir-strat. and haze; storm of lightning, thunder, and rain from 11 ^h to 16 ^h	0'9	0'6	1'0	1'0	60'6	57'8	—
21	Generally clear till 20 ^h ; remainder clouded; cir-cum. and cir-strat.; auroral light in N. at 10 ^h and 12 ^h	0'2	0'0	0'0	1'0	59'6	53'5	—
22	Generally clouded till 15 ^h ; cir. and haze; remainder clear; auroral light in N. at 12 ^h	0'8	0'3	0'4	0'0	73'8	50'3	—
23	Mostly clear; auroral light in N. from 12 ^h to 15 ^h	0'8	0'0	0'0	0'1	78'0	46'5	—
24	Generally clear till 21 ^h ; remainder clouded; cum-strat. and cir-cum.; storm of lightning, thunder, and rain from 22 ^h to 23 ^h	0'4	0'0	—	—	66'8	46'7	—
25	Generally clear	—	—	0'1	1'0	66'6	47'2	0'11
26	Clear till 8 ^h ; remainder mostly clouded; cir-strat. and cir-cum.	0'8	0'0	0'0	0'0	70'4	52'5	—
27	Mostly clear; auroral light in N. from 9 ^h to 12 ^h	0'0	0'2	0'6	0'3	75'6	47'7	—
28	Mostly clear; auroral light in N. from 9 ^h to 12 ^h	0'1	0'6	0'0	0'6	67'3	41'3	—
JUNE.								
1	Partly clouded till 15 ^h ; cir-cum. cir-strat. and haze; remainder clear	1'0	0'5	0'3	0'0	57'0	37'5	—
2	Clouded from 9 ^h to 12 ^h , and at 21 ^h ; cir. and haze; sheet lightning round S. horizon; remainder of day clear	0'0	1'0	0'1	1'0	63'8	41'7	—
3	Clouded till 8 ^h ; cir-cum. and haze; remainder clear	1'0	0'0	—	—	70'0	58'1	—
4	Clear and clouded alternately; showers; storm of lightning, thunder, rain, and hail at 5 ^h 30'	0'9	0'5	0'1	0'8	65'8	47'7	0'76
5	Mostly clouded till 9 ^h , with cir-cum. and cir-strat.; remainder quite clear	0'3	1'0	0'0	0'1	67'6	44'9	0'30
6	Quite clear	0'0	0'0	0'0	0'0	56'4	49'7	—
7	Mostly clear till 21 ^h ; remainder clouded; cir-cum. cum-strat. and haze	0'4	0'6	0'0	1'0	63'5	47'9	—
8	Generally clouded; cir-cum. cum-strat. and haze	0'2	1'0	1'0	0'6	68'3	47'7	—
9	Mostly clouded till 3 ^h ; cir-cum. and haze; remainder clear	0'7	0'0	—	—	74'0	57'5	—
10	Mostly clear; light cir-strat. in horizon	—	—	0'0	0'0	71'4	50'2	—
11	Mostly clear till 21 ^h ; light cir-strat. in horizon; remainder clouded; cir-cum. and cir-strat.	0'4	0'1	0'0	0'0	63'8	49'9	—
12	Mostly clouded till 9 ^h ; cir-cum. and cir-strat.; remainder of day clear	0'0	0'7	0'3	1'0	56'6	37'4	—
13	Quite clear	0'8	1'0	0'0	0'0	62'7	39'7	—
14	Clear till 16 ^h ; remainder clouded; cir-cum. and haze	0'0	0'0	0'0	0'0	67'6	49'7	—
15	Clouded; cir-cum. and haze; distant thunder at 3 ^h	0'0	0'0	0'0	1'0	92'0	65'8	—
16	Generally clouded; cir. and haze; sheet lightning in W. at 9 ^h	1'0	1'0	—	—	87'8	59'0	—
17	Generally clouded; cir-cum. and cum-strat.; some heavy thunder showers	—	—	0'0	1'0	82'2	61'0	—
18	Mostly clouded; cir-cum. and cum-strat.; a few clear spaces	1'0	1'0	0'8	0'5	76'0	61'0	—
19	Mostly clouded; cum-strat. and cir-strat.; faint auroral light in N. from 10 ^h to 12 ^h , rain from 18 ^h to 21 ^h	0'5	1'0	0'0	1'0	77'6	58'5	0'38
20	Clouded till 8 ^h ; cir-cum. and cum-strat.; remainder of day clear	0'8	1'0	0'9	0'8	73'6	52'0	—
21	Generally clear	0'4	1'0	1'0	1'0	71'2	51'5	0'13
22	Mostly clear	0'7	0'0	0'0	0'0	71'2	50'2	—
23	Mostly clouded; cir-cum. cir-strat. and haze until 11 ^h ; remainder mostly clear	0'1	0'0	—	—	77'4	54'5	—
24	Clouded; cum. cum-strat. and haze; thunder, lightning, and slight rain from 6 ^h to 12 ^h , and from 17 ^h to 22 ^h	—	—	0'1	0'8	73'6	44'7	—
25	Generally clouded; cir-strat. and cir-cum.	1'0	0'8	0'0	0'6	76'2	56'0	—
26	Mostly clouded till 8 ^h ; cir-cum. and cir-strat.; remainder of day quite clear	1'0	1'0	1'0	1'0	82'0	55'7	0'21
27	Partially clear till 9 ^h ; sheet lightning and some slight rain from 8 ^h to 12 ^h ; remainder of day clouded; cir-cum. and cum-strat.	0'9	0'8	0'9	0'1	77'4	64'4	—
28	Partially clear till 9 ^h ; sheet lightning and some slight rain from 8 ^h to 12 ^h ; remainder of day clouded; cir-cum. and cum-strat.	1'0	0'0	0'0	0'0	71'8	53'7	—
29	Partially clear till 9 ^h ; sheet lightning and some slight rain from 8 ^h to 12 ^h ; remainder of day clouded; cir-cum. and cum-strat.	0'3	1'0	0'3	1'0	75'6	50'0	0'05

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21	Max. Therm.	Min. Therm.	Rain.	In.	Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.	In.	
							3	9	17 ^a	21					
0.8	52.6	33.4	—	0.11											
0.7	49.4	34.6	—												
0.0	53.7	37.5	—												
0.0	64.2	40.1	—												
0.8	58.4	46.7	0.03												
—	70.6	47.1	—												
1.0	71.8	47.7	0.09												
0.2	68.2	46.7	—												
0.2	57.1	39.2	0.22												
1.0	62.0	42.9	0.15												
0.0	55.0	45.5	0.15												
1.0	51.4	41.2	—												
—	54.0	41.3	0.44												
0.6	47.8	39.0	—												
1.0	56.4	32.5	0.23												
0.5	57.2	46.1	—												
0.0	59.4	33.2	—												
1.0	64.6	33.7	—												
0.9	72.9	48.6	0.28												
—	71.7	55.5	0.26												
1.0	73.6	56.5	0.18												
1.0	60.6	57.8	—												
0.7	61.8	51.9	0.15												
1.0	59.6	53.5	—												
0.0	73.8	50.3	—												
0.1	78.0	46.5	—												
—	66.8	46.7	—												
1.0	66.6	47.2	0.11												
0.0	70.1	52.5	—												
0.3	75.6	47.7	—												
0.6	67.3	41.3	—												
JULY.															
1	Clear	—	—	—	—	—	0.0	0.0	—	—	78.0	51.5	—	In.	
2	Generally clouded; cir.-strat. and haze; some rain and occasional thunder	—	—	—	—	—	—	—	1.0	1.0	66.6	45.4	0.16	—	
3	Mostly clouded till 3 ^h ; cir.-cum. and cum.; remainder clear; aurora at 10 ^h and 11 ^h	—	—	—	—	—	0.5	0.2	0.0	0.0	64.6	54.9	—	—	
4	Clouded till 4 ^h ; cir., cir.-cum., and haze; remainder mostly clear; aurora from 10 ^h to 12 ^h	—	—	—	—	—	0.8	0.0	0.0	0.6	70.7	49.1	—	—	
5	Clear	—	—	—	—	—	0.2	0.0	0.4	0.0	70.6	44.1	—	—	
6	Mostly clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	0.8	1.0	0.8	0.8	72.3	48.7	—	—	
7	Mostly clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	0.8	0.5	0.9	1.0	72.0	58.0	—	—	
8	Clouded; cir.-strat., cir.-cum., and haze	—	—	—	—	—	1.0	1.0	—	—	66.2	57.0	—	—	
9	Generally clouded; cir.-cum., cum.-strat., cir.-strat.; showers of rain, with thunder and lightning	—	—	—	—	—	—	—	1.0	1.0	60.4	55.9	—	—	
10	Mostly clouded; cir.-cum. and cir.-strat.; brilliant aurora from 9 ^h to 11 ^h	—	—	—	—	—	0.9	0.2	1.0	1.0	64.9	58.2	0.28	—	
11	Mostly clouded; cir.-cum. and cum.-strat.; distant thunder; some slight rain	—	—	—	—	—	0.8	0.7	1.0	1.0	69.5	61.2	—	—	
12	Nearly clear; some slight cir.-cum. and cir.-strat. round horizon	—	—	—	—	—	1.0	0.7	0.7	0.4	75.1	61.5	—	—	
13	Mostly clouded till 4 ^h ; cir.-cum. and cir.-strat.; showers; remainder clear	—	—	—	—	—	0.3	0.1	0.1	0.2	76.8	59.7	—	—	
14	Partially clouded; cir.-cum. and cum.	—	—	—	—	—	0.7	0.0	0.0	0.0	82.2	61.2	0.14	—	
15	Clouded till 11 ^h ; cir.-strat., cir.-cum., and haze; showers; sheet lightning; lunar rainbow at 15 ^h 20', perfect	—	—	—	—	—	0.6	0.2	—	—	80.9	57.4	—	—	
16	Clear from 9 ^h to 11 ^h ; remainder partly clouded; cir.-cum. and cum.-strat.	—	—	—	—	—	0.9	0.6	0.1	0.3	61.7	45.7	0.28	—	
17	Mostly clouded; cir.-cum. and cir.-strat.; remainder nearly clear	—	—	—	—	—	0.8	0.0	0.5	0.6	72.2	49.2	—	—	
18	Mostly clouded; cir.-cum., cir.-strat., and haze	—	—	—	—	—	1.0	0.0	0.3	0.7	78.5	57.5	—	—	
19	Mostly clouded; cir.-cum., cir.-strat., and haze	—	—	—	—	—	0.7	1.0	1.0	1.0	79.2	57.1	—	—	
20	Clouded; cir.-cum. and cir.-strat.; showers during the day; steady rain from 12 ^h to 17 ^h	—	—	—	—	—	1.0	0.9	1.0	1.0	81.5	63.3	0.23	—	
21	Mostly clouded till 17 ^h ; cir.-strat. and haze; remainder clear; showers of rain from 8 ^h to 9 ^h	—	—	—	—	—	1.0	0.2	—	—	77.1	64.7	0.08	—	
22	Clouded; cir.-cum. and cir.-strat.; slight rain during the night	—	—	—	—	—	—	—	0.7	0.0	69.0	57.7	0.12	—	
23	Mostly clouded; cir.-cum. and haze	—	—	—	—	—	0.8	1.0	1.0	1.0	72.4	55.0	0.29	—	
24	Mostly clouded; cir.-strat. and haze; sheet lightning at 10 ^h and 11 ^h	—	—	—	—	—	0.7	0.4	0.7	0.9	75.0	60.6	—	—	
25	Mostly clear	—	—	—	—	—	0.8	1.0	1.0	1.0	75.4	54.2	0.05	—	
26	Partially clouded, with cir.-cum. and cum.-strat.	—	—	—	—	—	0.2	0.1	1.0	0.4	72.8	64.3	—	—	
27	Partially clouded; cir.-strat. and cir.-cum.	—	—	—	—	—	0.3	0.4	1.0	0.6	76.2	51.7	—	—	
28	Mostly clouded till 9 ^h ; cir.-cum. and cir.-strat.; remainder clear; showers of rain; sheet lightning at night	—	—	—	—	—	0.3	0.0	—	—	76.1	51.7	—	—	
29	Mostly clouded till 9 ^h ; cir.-cum. and cir.-strat.; remainder clear; showers of rain; sheet lightning at night	—	—	—	—	—	—	—	1.0	0.7	73.6	49.9	—	—	
30	Mostly clouded till 9 ^h ; cir.-cum. and cir.-strat.; remainder clear; showers of rain; sheet lightning at night	—	—	—	—	—	0.6	0.9	0.0	0.1	72.8	65.6	0.18	—	
AUGUST.															
1	Mostly clear; some light cum. and cir.-cum. occasionally	—	—	—	—	—	0.5	0.0	1.0	0.0	73.6	52.2	—	—	
2	Mostly clouded; cir.-strat. and haze	—	—	—	—	—	0.7	0.7	1.0	1.0	73.1	49.7	—	—	
3	Clouded all day; cir., cir.-strat., and haze; halo round the sun, diameter about 25', at 3 ^h ; showers during the night	—	—	—	—	—	1.0	1.0	1.0	1.0	77.2	52.5	0.23	—	
4	Mostly clouded; cir.-cum., cir.-strat., and haze; showers between 6 ^h and 7 ^h	—	—	—	—	—	1.0	1.0	0.6	1.0	73.7	63.3	0.31	—	
5	Partially clear; cir.-cum. and haze general	—	—	—	—	—	0.8	0.6	—	—	74.8	64.0	—	—	
6	Clear; mist at night	—	—	—	—	—	—	—	0.1	0.0	71.8	51.8	—	—	
7	Mostly clear; aurora at night from 9 ^h to 11 ^h	—	—	—	—	—	0.0	0.0	0.0	0.0	71.2	48.7	—	—	
8	Mostly clear; misty at 16 ^h and 17 ^h	—	—	—	—	—	0.0	0.1	0.7	0.0	75.7	48.9	—	—	
9	Mostly clear; some light cir.-cum. occasionally	—	—	—	—	—	0.4	0.0	0.0	0.0	79.1	53.0	—	—	
10	Mostly clouded; cir.-strat. and cir.-cum.; distant thunder in N.W. at 4 ^h ; slight rain between 6 ^h and 7 ^h	—	—	—	—	—	0.2	0.1	0.2	0.7	83.0	58.8	—	—	
11	Mostly clear; some cum. and cir.-cum.	—	—	—	—	—	0.9	0.8	0.7	0.5	84.9	61.1	—	—	
12	Mostly clear; some cum. and cir.-cum.	—	—	—	—	—	0.2	0.7	—	—	84.4	63.3	—	—	
13	Mostly clear; some light cir. and cir.-cum.; lightning in W. and N.W. at 9 ^h	—	—	—	—	—	—	—	0.5	0.3	81.2	65.5	—	—	
14	Clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	0.3	0.1	0.4	1.0	80.0	63.2	—	—	
15	Clouded; cir.-cum., cir.-strat., and haze; some slight rain and distant thunder during the day; rain at night	—	—	—	—	—	1.0	1.0	1.0	1.0	87.0	68.0	—	—	
16	Clouded; cum.-strat. and cir.-cum.	—	—	—	—	—	1.0	1.0	1.0	1.0	78.6	68.2	0.07	—	
17	Mostly clouded till 3 ^h ; cum.-strat. and cir.-cum.; remainder clear	—	—	—	—	—	1.0	1.0	1.0	0.5	77.8	62.5	—	—	
18	Generally clear till 9 ^h ; remainder clouded; cir. and haze	—	—	—	—	—	0.8	0.1	0.0	0.0	66.0	59.8	—	—	
19	Clear; aurora from 9 ^h to 11 ^h	—	—	—	—	—	0.2	0.0	—	—	74.0	56.2	—	—	
20	Partially clouded; cir.-strat. and haze	—	—	—	—	—	—	—	1.0	1.0	73.8	51.9	—	—	
21	Generally clouded; cir.-strat., cir., and cum.-strat.; some rain during the night	—	—	—	—	—	0.4	0.6	1.0	0.9	73.8	59.1	—	—	
22	Mostly clear; very bright perfect halo round the sun at 1 ^h 30' of the 27th, diameter about 40'; sky hazy; sun shining dimly	—	—	—	—	—	0.7	0.9	1.0	1.0	75.8	61.5	—	—	
23	Mostly clear; very bright perfect halo round the sun at 1 ^h 30' of the 27th, diameter about 40'; sky hazy; sun shining dimly	—	—	—	—	—	0.6	0.5	0.0	0.7	74.4	60.0	—	—	
24	Clouded till 4 ^h ; cir.-strat., cir.-cum., and haze; thunder in S.W. and N.W. at 2 ^h and 3 ^h ; aurora from 10 ^h to 11 ^h	—	—	—	—	—	0.0	0.0	—	—	75.4	58.5	—	—	
25	Clear all day	—	—	—	—	—	—	—	1.0	1.0	75.0	57.4	—	—	
26	Generally clear till 17 ^h ; remainder clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	1.0	0.2	0.0	0.0	72.6	66.9	—	—	
27	Clear from 9 ^h to 12 ^h ; remainder clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	0.1	0.0	0.0	0.0	78.4	54.5	—	—	
28	Generally clear till 17 ^h ; remainder clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	0.3	0.2	0.4	1.0	76.4	53.7	—	—	
29	Clear from 9 ^h to 12 ^h ; remainder clouded; cir.-cum. and cir.-strat.	—	—	—	—	—	1.0	0.0	1.0	0.8	79.0	59.1	—	—	

Toronto Mean Time.		Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
			3	9	17	21			
SEPTEMBER.									
D.									In.
1	}	Generally a few clear spaces till 17 ^h ; remainder clouded; cir.-cum. and cir.-strat.	0'9	0'9	0'7	1'0	76'7	62'6	—
2		Clear till 9 ^h ; remainder clouded; cum. and cir.-cum.	0'3	0'0	—	—	71'0	58'0	—
3		Mostly clear from 4 ^h to 11 ^h ; remainder clouded; cir.-cum. and haze; aurora at 10 ^h	0'3	0'0	0'9	0'8	77'4	59'2	—
4	}	Quite clear	0'1	0'0	0'0	0'0	80'4	58'5	—
5		Generally clear	0'2	0'0	0'0	0'0	73'4	48'2	—
6		Quite clear	0'0	0'0	0'0	0'1	68'0	40'1	—
7	}	Clouded from 0 ^h to 4 ^h , and at 21 ^h ; cir.-cum. and cir.-strat.; remainder clear	1'0	0'0	0'3	0'9	68'0	49'7	—
8		Clear at 4 ^h and 15 ^h ; remainder mostly clouded; cir.-cum. and cir.-strat.; lightning, thunder, and rain during the night	0'7	0'0	—	—	73'8	45'6	—
9		Clouded; cir.-cum. and cir.-strat.; thunder, lightning, and showers of rain during the day and night	1'0	1'0	1'0	0'8	69'2	54'7	0'13
10	}	Mostly clouded till 3 ^h ; cir., cir.-strat., and cir.-cum.; remainder clear	0'6	0'1	0'0	0'1	65'4	48'9	—
11		Generally clear till 4 ^h ; remainder clouded; cir., cir.-strat., and haze; commenced rain at 17 ^h ; halo round the sun at 4 ^h , diameter 40 ^h , perfect; halo round the moon at 9 ^h , 10 ^h , and 11 ^h , diameter 40 ^h , perfect	0'0	1'0	1'0	1'0	59'6	37'2	—
12		Clouded all day; rain at intervals, accompanied by lightning and thunder	1'0	1'0	0'6	1'0	60'4	47'0	1'00
13	}	Clouded till 2 ^h ; cir.-cum. and cum.-strat.; remainder clear; boards white with frost	0'4	0'0	0'0	0'0	58'3	50'2	—
14		Mostly clear till 3 ^h ; remainder clouded; cir.-cum. and haze; rain	0'1	1'0	—	—	57'4	35'1	—
15		Clouded all day	1'0	1'0	1'0	0'9	55'4	46'7	0'62
16	}	Clouded all day; cir.-cum. and cir.-strat.; constant rain most of the day	1'0	1'0	1'0	1'0	60'7	52'4	—
17		Mostly clouded; cir.-cum. and cir.-strat.; some rain; aurora at 9 ^h	0'6	0'6	1'0	0'4	61'9	50'7	0'20
18		Partially clear; cir.-cum. general; some showers of rain; hoar frost	0'9	0'5	0'2	0'0	63'8	51'7	0'22
19	}	Generally clear	0'3	0'0	0'1	0'2	59'4	40'7	0'07
20		Mostly clear; some cir.-cum. detached	0'4	0'2	—	—	52'4	36'2	—
21		Partially clouded till 2 ^h ; cir.-cum. and cum.-strat.; remainder mostly clear	0'5	0'0	0'1	0'4	48'2	30'9	—
22	}	Mostly clear	0'2	0'1	0'0	0'1	60'8	46'8	—
23		Clouded; cir.-strat., cir.-cum., and haze	0'2	0'1	0'0	0'1	55'8	42'3	—
24		Clouded; cum.-strat. and cir.-cum.; slight rain	1'0	1'0	0'6	1'0	59'8	30'2	—
25	}	Clouded; cum.-strat. and cir.-cum.; slight rain	1'0	1'0	1'0	1'0	47'9	28'1	—
26		Generally clouded; cir.-cum. and cir.-strat.; aurora from 9 ^h to 11 ^h ; rain	1'0	1'0	1'0	0'7	54'4	34'0	0'50
27		Mostly clouded; cir.-cum., cir.-strat., and haze; aurora from 9 ^h to 11 ^h	1'0	0'5	1'0	0'7	51'0	44'3	0'16
28			0'7	0'6	—	—	59'0	35'2	—
OCTOBER.									
1	}	Generally overcast; cir.-cum. and cir.-strat.	—	—	1'0	1'0	49'0	39'2	—
2		Clouded; cir.-strat. and haze; slight rain from 0 ^h to 9 ^h	1'0	1'0	1'0	1'0	49'3	44'1	0'23
3		Mostly clouded; cir.-strat. and haze	0'8	1'0	1'0	1'0	51'8	47'7	—
4	}	Clouded; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	1'0	57'8	51'5	—
5		Mostly clouded; cir.-cum., cir.-strat., and haze	1'0	0'2	1'0	1'0	58'5	46'7	—
6		Densely clouded all day; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	1'0	57'7	44'5	—
7	}	Mostly clouded; cir.-cum., cir.-strat., and haze; rain from 5 ^h to 8 ^h	1'0	1'0	—	—	52'0	46'6	0'22
8		Partially clouded; cir.-cum. and cum.-strat.; aurora at night	—	—	0'5	0'0	61'0	40'2	—
9		Clear till 4 ^h ; remainder clouded; cir.-cum., cum.-strat., and haze	0'0	1'0	0'8	0'4	50'0	31'3	—
10	}	Mostly clear	0'2	0'0	0'0	0'0	57'4	49'5	—
11		Mostly clear	0'0	0'0	0'4	0'0	54'6	24'5	—
12		Mostly clear	0'0	0'0	1'0	0'4	48'4	31'4	—
13	}	Partially clouded; cir., cir.-cum., and cir.-strat.	0'8	0'4	0'1	1'0	59'0	39'5	—
14		Clouded till 3 ^h , with cir.-cum. and cir.-strat.; remainder of day clear	0'6	0'0	—	—	48'0	33'9	—
15		Quite clear till 17 ^h ; remainder clouded; cir.-cum., cir.-strat., and haze	—	—	0'0	1'0	61'0	36'7	—
16	}	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain from 6 ^h to 10 ^h , and some during the night	1'0	1'0	1'0	1'0	58'6	46'5	0'20
17		Clouded all day; cum.-strat. and cir.-cum.	1'0	1'0	1'0	1'0	61'8	36'7	—
18		Clouded all day; cum.-strat., cir.-strat., cir.-cum., and haze; auroral light through the clouds at night	1'0	1'0	1'0	1'0	39'4	30'2	—
19	}	Clouded all day; cir.-strat. and haze	1'0	1'0	1'0	1'0	36'6	34'8	—
20		Clouded all day; cir.-cum., cir.-strat., and haze	1'0	1'0	0'9	0'2	44'0	39'7	—
21		Mostly clouded; cir.-strat., cir.-cum., and haze	1'0	0'4	—	—	46'5	36'2	—
22	}	Mostly clouded; cir.-cum., cir.-strat., and cum.-strat.	—	—	1'0	0'5	47'5	26'7	—
23		Mostly clouded; cir., cir.-cum., and haze; aurora at 9 ^h	0'8	1'0	1'0	1'0	45'0	31'0	—
24		Mostly clouded; cir.-cum. and cum.-strat.; rain	0'9	0'4	0'3	0'2	46'5	40'7	0'27
25	}	Mostly clouded; cir.-strat. and haze; aurora from 9 ^h to 12 ^h ; rain from 15 ^h to 17 ^h	0'9	1'0	1'0	0'8	54'7	35'6	0'06
26		Clear from 9 ^h to 11 ^h , and at 21 ^h ; remainder clouded; cir.-cum. and cum.-strat.	1'0	0'0	1'0	0'0	51'0	37'9	—
27		Clear till 17 ^h ; remainder clouded; cir.-strat. and haze	0'0	0'0	0'0	1'0	47'0	34'8	—
28	}	Clouded all day; cir.-strat. and haze	1'0	1'0	—	—	51'2	38'2	—
29		Clouded till 17 ^h ; cir.-cum. and haze; slight rain occasionally; remainder of day clear	—	—	1'0	0'0	51'8	49'7	0'14
30		Clouded; cir.-cum. and cir.-strat.; rain from 9 ^h to 17 ^h	1'0	1'0	1'0	0'5	54'4	45'9	0'25
31		Partially clouded; cir.-cum. and cir.-strat.; auroral light in N. from 9 ^h to 11 ^h ; rain	0'7	0'2	0'3	0'1	54'2	44'0	0'11

Max. Therm.	Min. Therm.	Rain.	Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
					3	9	17	21			
°	°	In.	D.	NOVEMBER.					°	°	In.
76.7	62.6	—	1	Mostly clear; some cum-strat. and cir-strat. round horizon	0.4	0.1	0.4	0.1	46.6	37.8	—
71.0	58.0	—	2	Nearly clear at 9 ^h ; remainder clouded; cum-strat., cir-cum., and cir-strat.	1.0	0.4	1.0	1.0	44.3	31.9	—
73.4	51.0	—	3	Clouded; cir-cum., cir-strat., and haze	1.0	1.0	1.0	1.0	38.9	31.6	—
77.4	50.2	—	4	Clouded; cir-cum., cum-strat., and haze; rain till 17 ^h	1.0	1.0	—	—	43.2	30.2	0.41
80.4	58.5	—	5	Mostly clouded; cir-cum. and cum-strat.	—	—	1.0	1.0	49.0	35.7	—
73.4	48.2	—	6	Mostly clouded; cir-strat. and haze	0.3	0.9	1.0	1.0	40.0	32.3	—
68.0	40.1	—	7	Mostly clouded; cir-strat. and haze; some particles of snow	0.9	0.3	0.8	1.0	42.0	26.9	—
68.0	49.7	—	8	Mostly clouded till 9 ^h ; cir-strat. and haze; remainder clear; some snow from 6 ^h to 9 ^h	1.0	1.0	0.1	0.0	35.7	24.8	—
73.8	45.6	—	9	Mostly clouded; cir-strat. and haze	0.8	0.0	1.0	1.0	33.6	20.1	—
65.0	38.7	0.13	10	Clouded all day; cir-strat. and haze; some faint auroral light at 11 ^h	1.0	1.0	1.0	1.0	28.0	15.9	—
69.2	54.7	0.24	11	Clouded all day; cir-cum. and cir-strat.; some slight snow	1.0	1.0	—	—	29.4	25.1	—
65.4	48.9	—	12	Clouded all day; cir-strat. and haze	—	—	1.0	1.0	31.6	25.2	—
59.6	37.2	—	13	Clouded all day; cir-strat. and haze; some very slight snow at 11 ^h	1.0	1.0	1.0	1.0	27.6	25.5	—
60.4	47.0	1.00	14	Clouded all day; cir-cum. and haze; slight rain at 10 ^h and 11 ^h	1.0	1.0	1.0	1.0	34.5	31.9	0.03
58.3	50.2	—	15	Clear at 9 ^h and 10 ^h ; remainder clouded; cir-cum. and haze	0.9	1.0	0.0	1.0	40.6	33.2	—
57.4	35.1	—	16	Clouded till 4 ^h ; remainder partly clear; cir-cum. and haze; auroral light from 10 ^h	1.0	0.4	0.2	0.7	39.2	35.4	—
53.4	46.7	0.62	17	Mostly clouded; cir-cum. and cir-strat.; very brilliant aurora at night	1.0	1.0	1.0	0.1	43.2	28.7	—
60.7	52.4	—	18	Mostly clouded; cir-cum. and cum-strat.; some slight appearance of aurora at night	1.0	0.4	—	—	37.7	26.1	—
61.9	50.7	0.20	19	Clouded all day; some slight auroral light at night	—	—	1.0	1.0	33.4	26.5	—
63.8	51.7	0.22	20	Mostly clear	0.0	0.0	0.6	1.0	33.0	30.2	—
59.4	40.7	0.07	21	Generally clear; aurora from 7 ^h to 11 ^h ; moderately bright	0.1	0.0	0.0	0.2	38.8	21.7	—
52.4	36.2	—	22	Clouded from 2 ^h to 10 ^h , and at 21 ^h ; cir-cum. and cir-strat.; remainder mostly clear; faint auroral light from 9 ^h to 11 ^h	1.0	0.9	0.0	1.0	41.1	27.7	—
48.2	30.9	—	23	Clear from 9 ^h to 11 ^h ; remainder clouded; cir-strat., cir-cum., and haze; faint auroral light at 11 ^h	0.9	0.0	1.0	1.0	40.8	26.9	—
60.8	46.8	—	24	Clouded all day; cir-cum., cir-strat., and haze; constant light rain till 8 ^h	1.0	1.0	1.0	1.0	43.0	29.8	0.89
55.8	42.3	—	25	Clouded all day; cir-cum. and cum-strat.; rain and sleet till 4 ^h	1.0	1.0	—	—	44.6	32.7	0.25
59.8	30.2	—	26	Clouded all day; cir-cum. and cum-strat.; aurora from 10 ^h to 12 ^h	—	—	1.0	1.0	38.1	28.7	—
47.9	28.1	—	27	Mostly clouded; cir-strat. and cir-cum.; faint auroral light at night	0.7	0.4	1.0	1.0	30.8	20.6	—
54.4	34.0	0.50	28	Mostly clouded; cum-strat. and cir-strat.	0.5	0.9	1.0	1.0	32.4	29.7	—
51.0	44.3	0.16	29	Clouded; cir-strat. and haze; rain from 2 ^h to 11 ^h ; heavy squall of wind at 16 ^h ; wind continuing high	1.0	1.0	1.0	1.0	41.0	35.7	0.45
59.0	35.2	—	30	Clouded all day; cir-cum. and haze	1.0	1.0	1.0	1.0	41.4	29.5	—
				DECEMBER.							
49.0	39.2	—	1	Clouded all day; cir-cum. and cum-strat.; snow from 3 ^h to 9 ^h ; turned to rain	1.0	1.0	1.0	0.9	38.0	23.7	0.50
49.3	44.1	0.23	2	Mostly clouded; cir-cum. and cum-strat.; rain	0.8	0.6	—	—	39.5	22.2	0.78
51.8	47.7	—	3	Clouded; cir-cum., cum-strat., and haze	—	—	1.0	1.0	40.4	33.2	—
57.8	51.5	—	4	Clouded; cir-cum., cir-strat., and haze; slight snow at 17 ^h	1.0	1.0	1.0	1.0	38.5	28.9	—
58.5	46.7	—	5	Clouded; cir-cum., cir-strat., and haze; snow at intervals	1.0	1.0	1.0	1.0	38.0	28.9	—
57.7	44.5	—	6	Clouded; cir-strat. and haze; drizzling rain, freezing as it falls from 2 ^h	1.0	1.0	1.0	1.0	31.1	26.2	0.25
52.0	46.6	0.22	7	Clouded; cir-cum. and haze; drizzling most of the day	1.0	1.0	1.0	0.8	29.0	26.2	0.39
61.0	40.2	—	8	Partly clear; cir-cum. and cir-strat. general	0.0	1.0	0.3	1.0	35.0	30.7	—
50.0	31.3	—	9	Clouded; cir-strat. and haze; sleet and rain from 9 ^h	1.0	1.0	—	—	48.8	27.7	0.25
57.4	49.5	—	10	Mostly clouded; some rain	—	—	1.0	1.0	34.4	31.8	0.35
54.6	24.5	—	11	Clouded; cum-strat.	1.0	1.0	1.0	1.0	46.6	26.2	—
48.4	31.4	—	12	Mostly clouded; cir-strat., cum-strat., and haze	1.0	1.0	0.4	0.7	30.1	23.5	—
59.0	39.5	—	13	Mostly clear; cum-strat. round horizon	0.0	0.3	0.2	0.8	30.6	22.2	—
48.0	33.9	—	14	Clear from 2 ^h to 4 ^h ; remainder clouded; cir-cum. and haze	0.0	1.0	0.8	0.1	34.2	27.7	—
61.0	36.7	—	15	Clouded from 10 ^h to 21 ^h ; cir-cum. and cir-strat.; remainder clear; slight snow at 15 ^h	0.0	0.0	1.0	1.0	42.0	32.2	—
58.6	46.5	0.29	16	Mostly clouded; cir-cum. and cum-strat.	0.9	0.9	—	—	35.6	27.5	—
61.8	36.7	—	17	Clouded; cir-strat. and haze	—	—	1.0	1.0	43.9	32.7	—
39.4	30.2	—	18	Clouded; cir-cum. and cum-strat.; faint appearance of auroral light at 10 ^h and 11 ^h	1.0	0.9	1.0	1.0	38.0	31.7	—
36.6	34.8	—	19	Clouded; dense; cir-cum. and haze	0.4	1.0	1.0	1.0	41.7	32.7	—
44.0	39.7	—	20	Clouded; cir. and haze	1.0	1.0	1.0	1.0	48.6	21.9	—
46.5	36.2	—	21	Clouded; dense; haze; snowing and drift	1.0	1.0	1.0	1.0	29.0	19.3	—
47.5	26.7	—	22	Mostly clouded; cir-cum. and haze; snowing and drift till 3 ^h	1.0	1.0	0.6	1.0	20.6	8.1	—
45.0	31.0	—	23	Mostly clouded; cir-cum. and cir-strat.; some slight snow from 19 ^h , which turned to rain at 21 ^h	0.9	1.0	—	—	12.8	1.1	—
46.5	40.7	0.27	24	Clouded; cir-cum. and haze; rain, which ceased at 2 ^h	—	—	1.0	1.0	25.6	18.0	0.24
54.7	35.6	0.06	25	Clouded; cir-cum. and cum-strat.	1.0	1.0	—	—	33.0	23.6	—
51.0	37.9	—	26	Mostly clouded; cir-cum. and cum-strat.	1.0	0.6	1.0	1.0	36.6	21.0	—
47.0	34.8	—	27	Clouded till 11 ^h ; cir-cum. and cir-strat.; snow from 0 ^h to 10 ^h ; cleared up	1.0	1.0	0.0	0.0	24.3	15.5	—
51.2	38.2	—	28	Clear till 3 ^h ; remainder clouded; cir-cum. and cir-strat.	0.0	1.0	0.6	1.0	33.1	15.7	—
51.8	49.7	0.14	29	Mostly clouded; cir-cum. and haze; clear at 17 ^h	0.8	0.4	0.0	0.4	30.6	27.5	—
54.4	45.9	0.25	30	Clear from 2 ^h to 4 ^h ; remainder clouded; cir-strat. and cum-strat.	0.0	1.0	—	—	34.2	11.4	—
54.2	44.0	0.11	31	Mostly clouded; cir-strat. and cum-strat.	—	—	0.7	0.6	31.7	15.7	—

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